

VDOIHI

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

Cilt 2.3.3.3.7.1.1.826

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 2.3.3.3.7.1.1.826

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

Sanırım bilgi ve teknolojideki kaderimiz veriyle ilişkilendirilmiş.

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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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durumunun bulunabileceği olaylara göre tek kalan simetrik olasılık

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herhangi iki ve son durumuna bağlı tek kalan simetrik olasılık

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

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

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

${}^0 \overset{DSSST}{fz \Rightarrow} j_i$: 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

${}^0 \overset{DSSST}{fz \Rightarrow} j_i,0$: 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

${}^0 \overset{DSSST}{fz \Rightarrow} j_i,D$: 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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$fz S_{j_{ik}, j^{sa}, D}^{DSST}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu

bağımlı simetrisinin herhangi iki durumuna bağlı tek kalan düzgün simetrik olasılık

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

$fz S_{j_s, j_{ik}, j^{sa}, 0}^{DSST}$: 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

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E2

BAĞIMLI ve BİR BAĞIMSIZ OLASILIKLI FARKLI DİZİLİMSİZ DAĞILIMLAR

Bağımlı ve Bir Bağımsız Olasılıklı Farklı Dizilimsiz Dağılımlar

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

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

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

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

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

Farklı dizilimsiz dağılımlarda simetrinin durumlarının olasılık dağılımındaki sırasına göre simetrik olasılıkları etkilediğinden, bu bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz dağılımları da etkiler. Bu nedenle bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz dağılımlarda, simetrinin durumlarının bulunabileceği olaylara göre simetrik olasılık eşitlikleri, simetrinin durumlarının olasılık dağılımındaki sıralamalarına göre ayrı ayrı verilecektir. Bu eşitliklerin elde edilmesinde bağımlı olasılıklı farklı dizilimsiz dağılımlarda simetrinin durumlarının bulunabileceği olaylara göre çıkarılan eşitlikler kullanılmaktadır. Bu eşitlikler, bir bağımlı ve bir bağımsız olasılıklı dağılımlar için VDO'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" durumları /bağımsız/bağımlı" 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-büyükçe sıralanan dağılımlarına göre verildiğinden bu dağılımlarda da aynı sıralama kullanılmaya devam edilecektir. Bağımlı olasılıklı farklı dizilimsiz dağılımlarda olduğu gibi bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz dağılımlarda da aynı eşitliklerde simetrinin durum sayıları düzenlenerek büyükten-küçükçe sıralanan dağılımlar için de simetrik olasılık eşitlikleri elde edilecektir.

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

SİMETRİDEN SEÇİLEN DÖRT DURUMA GÖRE TEK KALAN DÜZGÜN OLMAYAN SİMETRİK OLASILIK

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$\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_{(l_{sa}+...-l-s+1}$$

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

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

$$\frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!}$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$s \geq 0 \wedge s = s + k_1$$

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

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

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

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

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

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

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

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)} \sum_{j_{ik}=j_{sa}^{sa}+j_{sa}^{lk}-j_{sa}}^{(l_{sa}-l+1)} \sum_{(j_{sa}^{sa}=j_{sa}^{sa}+1)} \sum_{j_{ik}^{sa+s-j_{sa}}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-l_k_1} \sum_{(n_{sa}=n_{ik}+j_s)} \sum_{(j_{sa}^{sa}-l_k_2)} \sum_{(j_{sa}^{sa}-j_i-l_k_3)}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j_{sa}^{sa} - j_i - l_{k_1} - l_{k_2} - l_{k_3} - 2 \cdot j_{sa}^s)!}{(n_i - n - l_k - l_{k_2} - l_{k_3} - 1)!} \cdot \frac{1}{(2 \cdot j_s + j_{sa} - j_{sa}^{sa} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$s: (j_{sa}^s, k_1, j_{sa}^{ik}, k_2, j_{sa}, k_3, j_{sa}^i)$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$\frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!}$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$\sum_{j_{ik} = j_{sa}^{lk} + 1}^{l_{ik} - l + 1} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik} - j_{sa}^{lk} - j_{sa}^{lk_1} - j_{sa}^{lk_2} - j_{sa}^{lk_3} - \dots)}$$

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

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

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

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$$\frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!}$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$\frac{(n + 2 \cdot j_s - j^{sa} - j_i - 2 \cdot j_{sa}^s)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

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

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

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

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

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

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

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

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

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

$$s \geq j_{sa} = s + lk \wedge$$

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

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

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

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

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

$$\sum_{j_{i_k}=j_s+j_{s_a}^{l_{k_1}}-1}^{(\cdot)} \sum_{(j^{s_a}=j_{i_k}+j_{s_a}-j_{s_a}^{l_{k_1}})} \sum_{j_i=j^{s_a}+s-j_{s_a}}$$

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

$$\sum_{(n_{s_a}=n_{i_k}+j_{i_k}-j^{s_a}-l_{k_2})}^{(\cdot)} \sum_{n_s=n_{s_a}+j^{s_a}-j_i-l_{k_3}}$$

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

$$\frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!}$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$\sum_{n_s=n-j_i+1}^{(n_s-1)}$$

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

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

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

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

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

$$\begin{aligned}
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{k=0}^{(l_s - l + 1)} \sum_{j_s=2}^{(j_s - 1)} \sum_{j_{ik}=j_s + j_{sa}^{ik} - 1}^{(j_{sa} = j_{ik} + j_{sa}^{ik} - 1)} \sum_{j_i=j^{sa} + s - j_{sa}^{ik}}^{(j_i = j^{sa} + s - j_{sa}^{ik})} \\
& \sum_{n_i=n+l_{sa}^{ik}-1}^n \sum_{n_{ik}=n+l_{sa}^{ik}-j_{ik}}^{(n_{ik}=n+l_{sa}^{ik}-j_{ik})} \sum_{n_s=n_{sa}+j^{sa}-j_i-l_{k_1}}^{(n_s=n_{sa}+j^{sa}-j_i-l_{k_1})} \\
& \frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - l_{k_1} - l_{k_2} - l_{k_3} - 2 \cdot j_{sa}^s)!}{(n - l_{k_1} - l_{k_2} - l_{k_3})!} \cdot \\
& \frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
\end{aligned}$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$D \geq n < n \wedge l = \mathbb{k}_1 = 0 \wedge$$

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

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

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

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

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

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

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

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

$$\sum_{j_{i_k} = j^{s_a} + j_{s_a}^{i_k} - j_{s_a}}^{(l_{i_k} + j_{s_a} - l - j_{s_a}^{i_k} + 1)} \sum_{(j^{s_a} = j_{s_a} + 1)}^{l_i - l + 1} \sum_{j_i = l_{i_k} + s - l - j_{s_a}^{i_k} + 2}$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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$$(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_i-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!} \cdot \frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_s-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}$$

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

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

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

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

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

$$\begin{aligned}
& \sum_{j_{ik}=j^{sa}+j_{sa}^{lk}-j_{sa}} \sum_{(l_{sa}-l+1)} \sum_{l_i-l+1} \\
& \sum_{n_i=n+lk} \sum_{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-lk_1}
\end{aligned}$$

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

$$\frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!}$$

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

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

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

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

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

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

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

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

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

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

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

$$k_2 = 3 \wedge k = k_1 + k_2 + k_3$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$D \geq n < n \wedge l_i \leq l \wedge l_s \leq D - n - 2 \wedge$$

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

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

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

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

$$s \geq n - l_i \wedge I = \mathbb{k} > 0 \wedge$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$k_z = 3 \wedge k = k_1 + k_2 + k_3$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$\begin{aligned}
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{k=l}^{j_s} (j_s = j_{ik} - j_{sa}^{ik}) \cdot \\
& \sum_{k=l_i+n+j_{sa}^{ik}-s}^{l_s+j_{sa}^{ik}-l} (j^{sa} = j_{sa}^{ik} + j_{sa} - j_{sa}^{ik}) \cdot \sum_{k=l_i-1}^{l_i-l+1} (j_s = j_{ik} - j_{sa}^{ik}) \cdot \\
& \sum_{k=0}^n (j_s + 1) \cdot \sum_{k=0}^{n_{is}+j_s-j_{ik}-k_1} (n_{is} = n + k_1 + 1) \cdot \sum_{k=0}^{n_{ik} = n + k_2 + k_3 - j_{ik} + 1} (n_{sa} = n + k_3 - j^{sa} - k_2) \cdot \sum_{k=0}^{n_{sa} + j^{sa} - j_i - k_3} (n_{sa} = n + k_3 - j^{sa} + 1) \cdot \sum_{k=0}^{n_s = n - j_i + 1} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
& \frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot
\end{aligned}$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$\begin{aligned}
& \sum_{j_{ik}=j_s+j_{sa}^{lk}-1} \sum_{\binom{(\quad)}{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{lk}}} \sum_{j_i=j_{sa}+s-j_{sa}} \\
& \sum_{n_i=n+lk}^n \sum_{\binom{(n_i-j_s+1)}{n_{is}=n+lk-j_s+1}} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-lk_1}
\end{aligned}$$

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

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

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

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

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

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

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

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

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

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

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

$$k_z = 3 \wedge k = k_1 + k_2 + k_3$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$j_{sa}^s = s + lk \wedge$$

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

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

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

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

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

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

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3} (n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - k_1 - k_2 - k_3 - 2 \cdot j_{sa})! / (n_i - n - k_1 - k_2 - k_3)!$$

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

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

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

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

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

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

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

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

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

$s = \{j_{sa}^s, k_1, j_{sa}^{ik}, k_2, j_{sa}, k_3, j_{sa}^i\}$

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

$z: z = s + k = k_1 + k_2 + k_3 \Rightarrow$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$fz \mathcal{S}_{j_s, j_{ik}, j_{sa}^i} = \sum_{k=l}^{(l_{ik} - j_{sa}^{ik+2})} \sum_{j_i = j_{sa}^i - 1}^{(j_s - j_{sa}^i + 1)} \sum_{j_{sa} = j_{sa}^i - 1}^{(j_{sa} - 1)} \sum_{j_{sa}^{ik} = j_{sa}^i - 1}^{(j_{sa}^{ik} - 1)} \sum_{j_{sa}^s = j_{sa}^i - 1}^{(j_{sa}^s - 1)} \sum_{n_i = n + \mathbb{k}_1}^{(n_i - j_s + 1)} \sum_{n_{is} = n + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1}^{(n_{is} + j_s - j_{ik} - \mathbb{k}_1)} \sum_{n_{ik} = n + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1}^{(n_{ik} + j_{sa} - j_{sa} - \mathbb{k}_2)} \sum_{n_{sa} = n + \mathbb{k}_3 - j_{sa} + 1}^{(n_{sa} + j_{sa} - j_i - \mathbb{k}_3)} \sum_{n_s = n - j_i + 1}^{(n_s - 1)}$$

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

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

$$\begin{aligned}
& \sum_{n_i = \mathbf{n} + \mathbb{k}}^{\mathbf{n}} \sum_{\substack{(n_i - j_s + 1) \\ (n_{i_s} = \mathbf{n} + \mathbb{k} - j_s + 1)}} \sum_{\substack{n_{i_s} + j_s - j_{ik} - \mathbb{k}_1 \\ n_{ik} = \mathbf{n} + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1}} \\
& \sum_{\substack{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2) \\ (n_{sa} = \mathbf{n} + \mathbb{k}_3 - j^{sa} + 1)}} \sum_{\substack{n_{sa} + j^{sa} - j_i - \mathbb{k}_3 \\ n_s = \mathbf{n} - j_i + 1}} \\
& \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \\
& \frac{(n_{i_s} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{i_s} - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - \mathbb{k}_3)!} \cdot \\
& \frac{(n_s - 1)!}{(n_{sa} + j_i - n_s - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
& \frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l} - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa})! \cdot j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} \cdot
\end{aligned}$$

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

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

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

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

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

$$\frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!}$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$s \geq 1 \wedge s = s + \mathbb{k} \wedge$$

$$z: z = s + \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$\frac{1}{(n + 2 \cdot j_s + j_{sa} - j_i - 2 \cdot j_{sa}^s)!}$$

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

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

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

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

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

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

$$D \geq n < n - l_{k_1} - l_{k_2} - \dots - l_{k_3} > \wedge$$

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

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

$$s \geq 0 \wedge s = s + l_{k_1} \wedge$$

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

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

$$\begin{aligned}
 & \sum_{j_{ik}=j_s+j_{sa}^{lk}-1} \sum_{(l_{sa}-l+1)}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa+s}-j_{sa}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k+l_3-j_{ik}-l_1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n+l_{k_3}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{n_s=j_i+1}^{n_{sa}+j^{sa}-j_i-l_1} \\
 & \frac{(n_i-1)!}{(j_s-2)! \cdot (n_i-n_{is}+1)!} \cdot \frac{(n_{is}-n_{ik}+1)!}{(j_{ik}-j_s+1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \\
 & \frac{(n_{ik}-n_{sa}-l_{k_2}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_s-n_{sa}-j^{sa}-l_{k_2})!} \cdot \frac{(n_{sa}-n_s-l_{k_3}+1)!}{(j_i-n_{sa}-1)! \cdot (n_{is}+j^{sa}-n_s-j_i-l_{k_3})!} \\
 & \frac{(n_s-1)!}{(l_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \\
 & \frac{(l_{sa}+j_{sa}^{lk}-l_{ik}-j_{sa})!}{(l_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{lk}-j_{ik}-j_{sa})!} \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!}
 \end{aligned}$$

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

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

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

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

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

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

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

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

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

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

$$s \geq 0 \wedge s = s + k_1$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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$$n + 2 \cdot j_s + j_{sa} - j_{sa} - j_i - 2 \cdot j_{sa}^s!$$

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

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

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

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

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

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

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

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

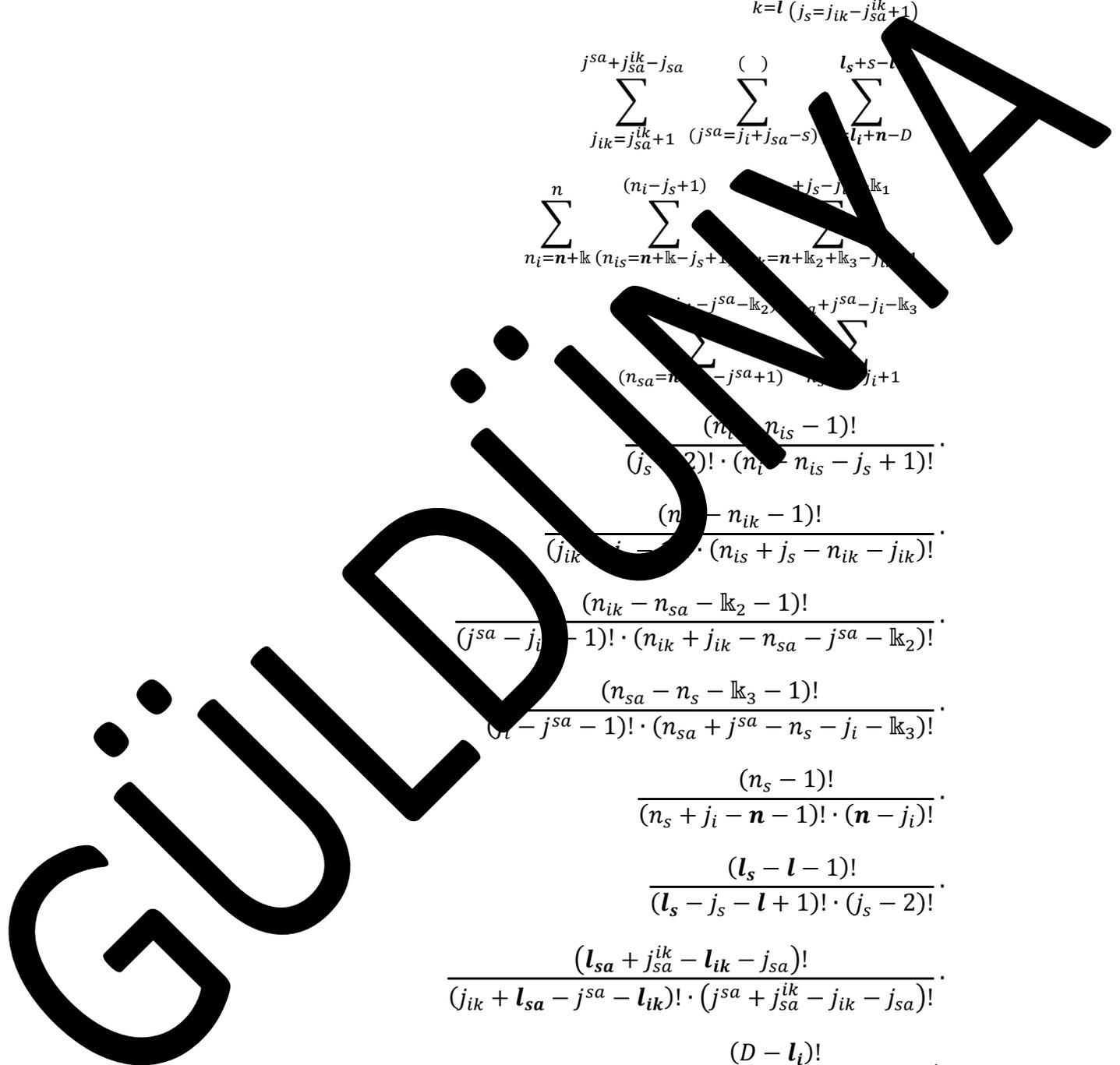
$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

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

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

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

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



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

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

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

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

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

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

$$\frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!}$$

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

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

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

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

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

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

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

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

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

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

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

$k_z = 3 \wedge k = k_1 + k_2 + k_3$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$\begin{aligned}
 & \sum_{j_{ik}=\mathbf{l}_i+\mathbf{n}+j_{sa}^{\mathbf{l}k}-D-s}^{\mathbf{l}_{ik}-\mathbf{l}+1} \sum_{(j_{sa}^{\mathbf{l}k}=j_{ik}+j_{sa}-j_{sa}^{\mathbf{l}k})}^{(\cdot)} \sum_{j_i=j_{sa}^{\mathbf{l}k}+s-j_{sa}} \\
 & \sum_{n_i=\mathbf{n}+\mathbf{l}k}^n \sum_{(n_{is}=\mathbf{n}+\mathbf{l}k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}_{is}+j_s-j_{ik}-\mathbf{l}k_1}
 \end{aligned}$$

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

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

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

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

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

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

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

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

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

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

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

$k_z = 3 \wedge k = k_1 + k_2 + k_3$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$D + s - n \leq D + j_s + s - n - 1 \wedge$$

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

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

$$s \cdot \{s_{sa}^{ik-1}, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$\frac{(n_{is} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - j_s - n_{ik} - j_{ik})!}$$

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

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

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

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

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

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

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

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

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

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

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

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

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

$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!} \cdot \frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!} \cdot \frac{(D - l)!}{(D + j_i - n - l_i)! (n - j_i)!}$$

$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa}^{ik}$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s - l_{sa} \wedge$

$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$

$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{ik} - 1$

$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$fz^S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_s+j_{sa}-l)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\begin{aligned}
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
& \frac{(n_s + j_i - n - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(n_s - l - 1)!}{(n_s - l - 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} + j^{sa} - l_{ik} - j^{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (l_{sa} + j^{sa} - j_{ik} - j^{sa})!} \cdot \\
& \frac{(D - l_i)!}{(D + l_i - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)} \\
& \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=l_s+j_{sa}-l+1)}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
\end{aligned}$$

$$\begin{aligned}
& \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 1)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{j_{sa} = j^{sa} + j_{sa}^{lk} - j_{sa}}^{(l_s - j_{sa} - l)} \sum_{j_{ik} = l_{sa} + n - D}^{(j_{sa} - j_{sa}^{lk} + 1)} \sum_{j_i = j^{sa} + s - j_{sa}}^{(n_i - 1)} \\
& \sum_{n_{is} = n + \mathbb{k} - j_s + 1}^{(n_i - 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}^{(n_i - 1)} \sum_{n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}^{(n_i - 1)} \sum_{n_s = n_{sa} + j^{sa} - j_i - \mathbb{k}_3}^{(n_i - 1)} \\
& \frac{(n_i + j_s + j_{sa} - j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!} \cdot \\
& \frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
\end{aligned}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

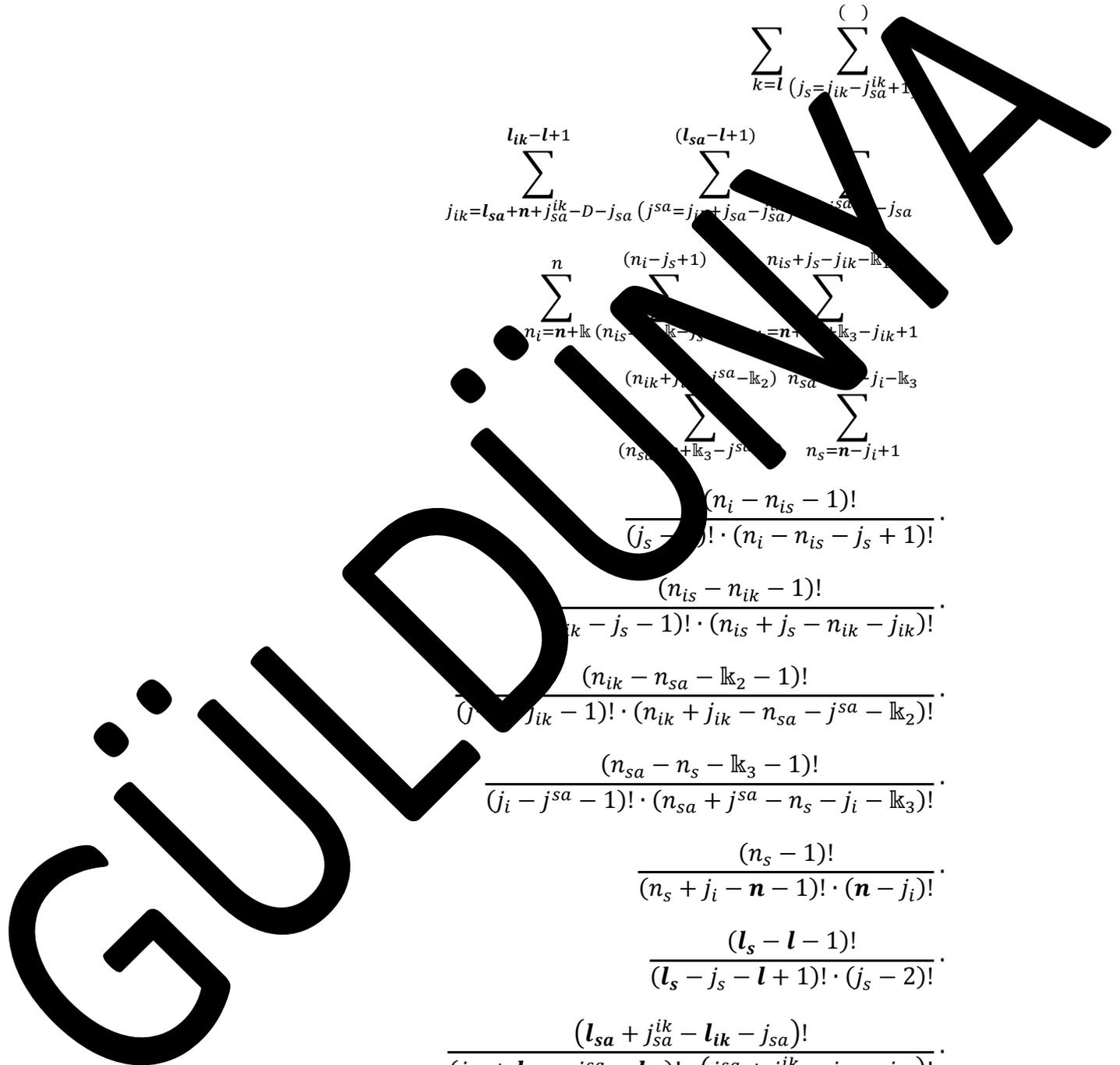
$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$f_z \mathcal{D}_{j_s, j_{ik}, j_{sa}, j_i} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)} \sum_{(l_{sa} = n - D)} \sum_{(j_i = j_{sa} + s - j_{sa})} \sum_{(j_{ik} = j_{sa}^{ik} + 1)} \sum_{(n_i = n)} \sum_{(n_{is} = n + k_1 - s + 1)} \sum_{(n_{ik} = n + k_2 + k_3 - j_{ik} + 1)} \sum_{(n_{sa} = n + k_3 - j_{sa} + 1)} \sum_{(n_s = n - j_i + 1)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!} \cdot \frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i - k_3)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

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$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=l}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()} \sum_{j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa}}^{l_{ik}-l+1} \sum_{(j^{sa}=j_i+j_{sa}-j_{sa}^{sa})}^{(l_{sa}-l+1)} \sum_{(n_i=n+l_k)}^n \sum_{(n_{is}=n+l_k-j_s)}^{(n_i-j_s+1)} \sum_{(n_{is}+j_s-j_{ik}-l_{k_1})}^{(n_{is}+j_s-j_{ik}-l_{k_1})} \sum_{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{(n_{sa}=n+l_{k_3}-j_{ik}+1)}^{(n_{sa}=n+l_{k_3}-j_{ik}+1)} \sum_{(n_{sa}+l_{k_3}-j^{sa})}^{(n_{sa}+l_{k_3}-j^{sa})} \sum_{(n_s=n-j_i+1)}^{(n_s=n-j_i+1)} \frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(n_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \frac{(n_{sa} - n_s - l_{k_3} - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - l_{k_3})!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$



$$\sum_{k=l}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa}}^{l_{ik}-l+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j^{sa}+s-j_{sa}}^{()}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} n_{ik}=n_{is}+j_{ik}-k_1$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{(n_{sa}=n_{sa}+j^{sa}-j_i)}^{()}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - k_2 - j_s - 2 \cdot j_{sa}^s)!}{(n_i - k_1 - k_2 - j_s - 2 \cdot j_{sa}^s)!}$$

$$\frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq 1 \wedge l_s \leq D - n - 1 \wedge$$

$$1 < j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_{sa}^{ik} + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_i \leq j_i + j_{sa} - j_{sa} \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n - l_{sa} \leq D - l_s + j_{sa} - n - 1 \wedge$$

$$D > n - n \wedge I = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s \cdot \{j_{sa}^{ik-1}, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$fzS_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(\)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{sa}+n+j_{sa}^{ik}-D-j_{sa}-1} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+s-}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2}^{n_{is}+j_s-j_{ik}-k_1} \dots -j_{ik}+1$$

$$\sum_{(n_{ik}+j_{ik}-j^{sa}-1)}^{(n_{ik}+j_{ik}-j^{sa}-1)} \sum_{(n_{sa}=n+k_3-1)}^{(n_{sa}=n+k_3-1)} \sum_{n_s=n-j_i+1}^{(n_{sa}+j_{sa}-j_i-k_3)}$$

$$\frac{(n_s - n_{is} - 1)!}{(j_s - 2)! \cdot (n_{is} + j_s + 1)!}$$

$$\frac{(n_{is} - j_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{ik} - j_{sa} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!}$$

$$\frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=l}^{(\)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa}}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

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$$\begin{aligned}
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^{\mathbf{n}} \sum_{\substack{(n_i-j_s+1) \\ (n_{i_s}=\mathbf{n}+\mathbb{k}-j_s+1)}} \sum_{\substack{n_{i_s}+j_s-j_{ik}-\mathbb{k}_1 \\ n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}} \\
& \sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}} \sum_{\substack{n_{sa}+j^{sa}-j_i-\mathbb{k}_3 \\ n_s=\mathbf{n}-j_i+1}} \\
& \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \\
& \frac{(n_{i_s} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{i_s} - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - \mathbb{k}_3)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa})! \cdot (j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot
\end{aligned}$$

$$\sum_{k=l}^{\binom{(\cdot)}{j_s=j_{ik}-j_{sa}^{ik}+1}}$$

$$\sum_{j_{ik}=l_{sa}+\mathbf{n}+j_{sa}^{ik}-D-j_{sa}}^{l_s+j_{sa}^{ik}-l} \sum_{\binom{(\cdot)}{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^{\mathbf{n}} \sum_{\substack{(n_i-j_s+1) \\ (n_{i_s}=\mathbf{n}+\mathbb{k}-j_s+1)}} \sum_{n_{ik}=n_{i_s}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(\cdot) \\ (n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}$$

$$\frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!}$$

$$\frac{(D - l)!}{(D + j_i - n - l_i)! (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa}^{ik}$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s - j_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^l - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^l\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_{sa} + n - D - j_{sa})} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(l_{sa}-l+1)} \sum_{(j^{sa}=l_{sa}+n-D)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\begin{aligned}
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l - 1)!}{(l_s - l + 1)! \cdot (l - 2)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - 1)!}{(j_{ik} + l_{sa} - j^{sa} - 1)! \cdot (j^{sa} + j_{sa} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(D - l_{sa})!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=l}^{ik-l-j_{sa}^{ik}+2} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)} \\
& \sum_{j_{ik}+j_s+j_{sa}^{ik}-1}^{(l_{sa}-l+1)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+s-j_{sa}} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1)}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot
\end{aligned}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=0}^{l-j_s-2} \sum_{l_{sa}=l_{sa}+n-D-j_{sa}}$$

$$\sum_{j_{ik}=j_s+1}^{n-1} \sum_{(j^{sa}=j_s+1, j_{sa}-j_{sa}^{ik})} \sum_{j_i=j_s+1}^{n-1} \sum_{s-j_{sa}}$$

$$\sum_{n+l_k}^n \sum_{(n_{is}=n+l_k, j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \sum_{n_s=n_{sa}+j^{sa}-j_i-l_{k_3}}$$

$$\frac{(n_i + 2 \cdot j_i + j_{sa} - j^{sa} - j_i - l_{k_1} - l_{k_2} - l_{k_3} - 2 \cdot j_{sa}^s)!}{(n_i - n - l_{k_1} - l_{k_2} - l_{k_3})!}$$

$$\frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$j_s > n - l \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{l=1}^{(l_s - n - D - j_{sa})} \sum_{(j_s - 2)}^{(j_s - 2)}$$

$$\sum_{j_{ik} = j_s + j_{sa} - l + 1}^{(j_{sa} = l_{sa} + n - j_{sa} - l + 1)} \sum_{j_i = j_{sa} + s - j_{sa}}^{(j_i = j_{sa} + s - j_{sa})}$$

$$\sum_{n_i = n + k}^{(n_i = n + k - j_s + 1)} \sum_{n_{is} = n + k - j_s + 1}^{(n_{is} = n + k - j_s + 1)} \sum_{n_{ik} = n + k_2 + k_3 - j_{ik} + 1}^{(n_{ik} = n + k_2 + k_3 - j_{ik} + 1)}$$

$$\sum_{(n_{ik} = n_{sa} - j_{sa} - k_2)}^{(n_{ik} = n_{sa} - j_{sa} - k_2)} \sum_{n_{sa} = j_{sa} - j_i - k_3}^{(n_{sa} = j_{sa} - j_i - k_3)}$$

$$\sum_{(n_{sa} = j_{sa} - j_i - k_3)}^{(n_{sa} = j_{sa} - j_i - k_3)} \sum_{n_s = n - j_i + 1}^{(n_s = n - j_i + 1)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!}$$

$$\frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i - k_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\begin{aligned}
 & \sum_{k=l}^{(l_s-l-1)} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_s-l-1)} \\
 & \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(l_{sa}-l+1)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{(l_s-l-1)} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n+l_{k_3}-j_{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa})} \sum_{(n_s=n-j_i)}^{(n_{sa}+j_{sa}-j_i-l_{k_3})} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_s - 2)! \cdot (n_{is} + j_s + 1)!} \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \\
 & \frac{(n_{ik} - n_s - l_{k_2} - 1)!}{(n_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \\
 & \frac{(n_{sa} - n_s - l_{k_3} - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - l_{k_3})!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

$$\begin{aligned}
 & \sum_{k=l}^{(l_s-l-1)} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_s-l-1)} \\
 & \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(l_{sa}-l+1)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{(l_s-l-1)}
 \end{aligned}$$

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$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3} (n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - k_1 - k_2 - k_3 - 2 \cdot j_s)! \cdot \frac{1}{(n_i - n - k_1 - k_2 - k_3)!} \cdot \frac{1}{(n + 2 \cdot j_s + j_{sa} - j_i - j_s \cdot j_s)!} \cdot \frac{(l_i - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!} \cdot \frac{(D - l)!}{(D - j_i - n - l + 1)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$
 $D + l_s + s - n - l_i + 1 \leq l \leq i \wedge l - 1 \wedge$
 $1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} = 1 \wedge j_s \leq j_{ik} + j_{sa}^{ik} - 1 \wedge$
 $j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + j_{sa} \leq j_i \leq n \wedge$
 $l_{ik} - j_{sa}^{ik} + 1 = l \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_{sa} > l_{ik} \wedge j_{sa} - s = l_{sa} \wedge$
 $D + s - n < l_i \leq D - l_s + s - n - 1$
 $D \geq n < n \wedge l > 0$
 $j_{sa} > j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa} = j_{sa}^{ik} - 1 \wedge$
 $s: \{j_{sa}^s, k_1, \dots, k_2, j_s, \dots, k_3, j_{sa}^i\} \wedge$
 $s \geq 0, s = s +$
 $k_z: z = 3, k_z = k_1 + k_2 + k_3 \Rightarrow$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}-l+1} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{()} \sum_{j_i=l_i+n-D}^{l_i-l+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_s+1) \\ (n_{i_s}=n+l_k-j_s+1)}} \sum_{\substack{n_{i_s}+j_s-j_{ik}-l_{k_1} \\ n_{ik}=n+l_{k_2}+l_{k_3}-j_{ik}+1}} \\ \sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-l_{k_2}) \\ (n_{sa}=n+l_{k_3}-j^{sa}+1)}} \sum_{\substack{n_{sa}+j^{sa}-j_i-l_{k_3} \\ n_s=n-j_i+1}} \\ \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \\ \frac{(n_{i_s} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{i_s} - n_{ik} - j_{ik})!} \cdot \\ \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\ \frac{(n_{sa} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{sa} + j^{sa} - n_s - l_{k_3})!} \cdot \\ \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\ \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\ \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa})! \cdot j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\ \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

$$\sum_{k=l}^{\binom{()}{j_s=j_{ik}-j_{sa}^{ik}+1}}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{\binom{()}{j^{sa}=j_i+j_{sa}-s}} \sum_{\substack{l_{ik}+s-l-j_{sa}^{ik}+1 \\ j_i=l_i+n-D}}$$

$$\sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_s+1) \\ (n_{i_s}=n+l_k-j_s+1)}} \sum_{n_{ik}=n_{i_s}+j_s-j_{ik}-l_{k_1}}$$

$$\sum_{\substack{() \\ (n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}} \sum_{n_s=n_{sa}+j^{sa}-j_i-l_{k_3}}$$

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$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}$$

$$\frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!}$$

$$\frac{(D - l)!}{(D + j_i - n - l_i)! (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$D + l_s + s - n - l_i + 1 \leq l \leq i \wedge l - 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i - n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} \wedge j_{sa}^s = j_{sa}^{ik} \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k}$$

$$\mathbb{k}_2 = 3 \wedge \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\cdot)} \sum_{j_i=l_i+n-D}^{l_i-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\begin{aligned}
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
& \frac{(n_s + \mathbb{k}_1 - n - 1)!}{(n_s + \mathbb{k}_1 - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(n_s - l - 1)!}{(n_s - l - 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(j_{sa} + j_{sa} - j_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - j_{ik})! \cdot (j_{sa} + j_{sa} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(D - l_i)!}{(D + \mathbb{k}_1 - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{k=l}^{(\quad)} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\quad)} \\
& \sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}}^{(\quad)} \sum_{(j^{sa} = j_i + j_{sa} - s)}^{(\quad)} \sum_{j_i = l_i + n - D}^{l_s + s - l} \\
& \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1} \\
& \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\quad)} \sum_{n_s = n_{sa} + j^{sa} - j_i - \mathbb{k}_3} \\
& \frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!} \cdot \\
& \frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot
\end{aligned}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$D + l_s + s - n - l_i + 1 \leq l \leq i - 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f^{z^s, j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=l}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l+1} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{()}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\begin{aligned}
& \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 1)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{j_{ik}=j^{sa}+s-j_{sa}}^{(j_{ik}+j_{sa}-j_{sa}^{ik+1})} \sum_{j_{sa}=l_{ik}+j_{sa}-D-s}^{(j_{sa}-l_{ik}-j_{sa}^{ik+1})} \sum_{j_i=j^{sa}+s-j_{sa}}^{(j_i-j_{sa}^{ik+1})} \\
& \sum_{n+l_k}^{(n_{is}=n+l_k-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(n_i-1)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3)} \\
& \frac{(n_i + j_s + j_{sa} - j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!} \cdot \\
& \frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
\end{aligned}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$D + l_s + s - n - l_i + 1 \leq l \leq i - 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$fz^s = \sum_{i_k=j_{sa}^{ik}+1}^{l_{ik}-l_i} \sum_{j_i=j_{sa}^i-s-j_{sa}}^{(l_i+j_{sa}-s+1)} \sum_{n_s=n-j_i+1}^{(n_i-j_s)} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{n_{sa}=n+k_3-j_{sa}+1}^{(n_{ik}+j_{ik}-j_{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j_{sa}-j_i-k_3} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$fz S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=2)}^{(l_{ik}-l-j_{sa}^{ik}+2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(l_i+j_{sa}-l-s+1)} \sum_{(j_{sa}=l_i+n+j_{sa})}^{(l_i+j_{sa}-l-s+1)} \sum_{i=j_s+j_{sa}-j_{sa}}^{(l_i+j_{sa}-l-s+1)}$$

$$\sum_{n_i=n+k}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{is}=n-k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}}$$

$$\frac{(n_{ik}-j_{sa}-k_2-1)!}{(n_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j_{sa}-k_2)!}$$

$$\frac{(n_{sa}-n_s-k_3-1)!}{(j_i-j_{sa}-1)! \cdot (n_{sa}+j_{sa}-n_s-j_i-k_3)!}$$

$$\frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!}$$

$$\frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!}$$

$$\frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j_{sa}-l_{ik})! \cdot (j_{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}$$

$$\frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!}$$

GÜLDÜŞÜNYA

$$\sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{ik}-l-j_{sa}^{ik}+2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{()} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j_{sa}+s-j_{sa}^{ik}}^{()}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{ik}-k_1}^{(n_{is}-j_{ik}+1)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-k_2)}^{()} \sum_{(n_{sa}+j_{sa}-j_i)}^{()}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j_{sa}^{ik} - k_2 - j_{sa} - 2 \cdot j_{sa}^s)!}{(n_i + 2 \cdot j_s + j_{sa} - j_{sa}^{ik} - k_2 - j_{sa} - 2 \cdot j_{sa}^s)!}$$

$$\frac{1}{(n + 2 \cdot j_s + j_{sa} - j_{sa}^{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l \neq l \wedge l_s \leq D - n - 1 \wedge$

$D + l_s + s - l_i + 1 < l \leq l_i - 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} - 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$

$D \geq n < n \wedge l = k > 0 \wedge$

$j_{sa} - j_{sa} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k \wedge$

$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$

$$fzS_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(\quad)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}-l+1} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\quad)} \sum_{j_i=l_{sa}+n+s-D-j_{sa}^{ik}+1}^{l_{sa}+s-l-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}}$$

$$\frac{(n_{ik}+j_{ik}-j^{sa})! \cdot (n_{sa}+j^{sa}-j_i-l_{k_3})!}{(n_{sa}=n+l_{k_3}-j^{sa}+1)! \cdot (n_s=n-j_i+l_{k_3}-j^{sa}+1)!}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_s-2)! \cdot (n_{is}-n_{ik}-j_s+1)!}$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}-j_s-n_{ik}-j_{ik})!}$$

$$\frac{(n_{ik}-n_{sa}-l_{k_2}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}-j_{ik}-n_{sa}-j^{sa}-l_{k_2})!}$$

$$\frac{(n_{sa}-n_s-l_{k_3}-1)!}{(j_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-l_{k_3})!}$$

$$\frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!}$$

$$\frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!}$$

$$\frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}$$

$$\frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!}$$

$$\sum_{k=l}^{(\quad)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\quad)} \sum_{j_i=l_{sa}+n+s-D-j_{sa}^{ik}+1}^{l_{ik}+s-l-j_{sa}^{ik}+1}$$

GÜLDÜZÜMÜYA

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3} \frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - k_1 - k_2 - k_3 - 2 \cdot j_s)!}{(n_i - n - k_1 - k_2 - k_3)!} \cdot \frac{1}{(n + 2 \cdot j_s + j_{sa} - j_i - j_s \cdot j_s^s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!} \cdot \frac{(D - n)!}{(D - j_i - n - j_i)!}$$

$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$

$D + l_s + s - n - l_i + 1 \leq l \leq i \wedge l - 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} = 1 \wedge j_s \leq j_{ik} + j_{sa}^{ik} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_{sa} + j_{sa} - s = l_{sa} \wedge$

$D + j_{sa} - n < l_{sa} \leq l + l_s + j_{sa} - n \wedge$

$D \geq n < n \wedge l > 0 \wedge$

$j_{sa} \leq j_{ik} - 1 \wedge j_{sa}^{ik} \leq j_{ik} - 1 \wedge j_{sa} = j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, k_1, \dots, k_2, j_s, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 0 \wedge s = s + 1 \wedge$

$k_z: z = 3 \wedge k_z = k_1 + k_2 + k_3 \Rightarrow$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{()} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{sa}+s-l-j_{sa}+1}$$

$$\begin{aligned}
& \sum_{n_i=\mathbf{n}+\mathbf{k}}^{\mathbf{n}} \sum_{(n_{i_s}=\mathbf{n}+\mathbf{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{i_k}=\mathbf{n}+\mathbf{k}_2+\mathbf{k}_3-j_{i_k}+1}^{n_{i_s}+j_s-j_{i_k}-\mathbf{k}_1} \\
& \sum_{(n_{s_a}=\mathbf{n}+\mathbf{k}_3-j^{s_a}+1)}^{(n_{i_k}+j_{i_k}-j^{s_a}-\mathbf{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{s_a}+j^{s_a}-j_i-\mathbf{k}_3} \\
& \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \\
& \frac{(n_{i_s} - n_{i_k} - 1)!}{(j_{i_k} - j_s - 1)! \cdot (n_{i_s} - n_{i_k} - j_{i_k})!} \cdot \\
& \frac{(n_{i_k} - n_{s_a} - 1)!}{(j^{s_a} - j_{i_k} - 1)! \cdot (n_{i_k} + j_{i_k} - n_{s_a} - j^{s_a} - \mathbf{k}_2)!} \cdot \\
& \frac{(n_{s_a} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{i_k} + j^{s_a} - n_s - \mathbf{k}_3)!} \cdot \\
& \frac{(n_s - 1)!}{(n_{i_k} + j_i - n_s - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{s_a} + j_{s_a}^{i_k} - l_{i_k} - j_{s_a})!}{(j_{i_k} + l_{s_a} - j^{s_a} - l_{i_k})! \cdot (j^{s_a} + j_{s_a}^{i_k} - j_{i_k} - j_{s_a})!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot
\end{aligned}$$

$$\sum_{k=l}^{\binom{(\cdot)}{j_s=j_{i_k}-j_{s_a}^{i_k}+1}}$$

$$\sum_{j_{i_k}=j^{s_a}+j_{s_a}^{i_k}-j_{s_a}}^{\binom{(\cdot)}{j^{s_a}=j_i+j_{s_a}-s}} \sum_{j_i=l_{s_a}+\mathbf{n}+s-D-j_{s_a}}^{l_s+s-l}$$

$$\sum_{n_i=\mathbf{n}+\mathbf{k}}^{\mathbf{n}} \sum_{(n_{i_s}=\mathbf{n}+\mathbf{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{i_k}=\mathbf{n}_{i_s}+j_s-j_{i_k}-\mathbf{k}_1}$$

$$\sum_{(n_{s_a}=\mathbf{n}_{i_k}+j_{i_k}-j^{s_a}-\mathbf{k}_2)}^{\binom{(\cdot)}{j^{s_a}=j_i+j_{s_a}-s}} \sum_{n_s=\mathbf{n}_{s_a}+j^{s_a}-j_i-\mathbf{k}_3}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}$$

$$\frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!}$$

$$\frac{(D - l)!}{(D + j_i - n - l_i)! (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$D + l_s + s - n - l_i + 1 \leq l \leq i \wedge l - 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i - n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k}$$

$$\mathbb{k}_2 = 3 \wedge \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}-l+1} \sum_{(j_{sa}=l_{sa}+n-D)}^{(l_{sa}-l+1)} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j_{sa}+1)}^{(n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j_{sa}-j_i-\mathbb{k}_3}$$

$$\begin{aligned}
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2 - 1)!} \cdot \\
& \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
& \frac{(n_s + j_i - n - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(n_s - l - 1)!}{(n_s - l - 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} + j^{sa} - l_{ik} - j^{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (l_{sa} + j^{sa} - j_{ik} - j^{sa})!} \cdot \\
& \frac{(D - l_i)!}{(D + l_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)} \\
& \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(l_{ik}+j_{sa}-l-j_{sa}^{ik}+1)} \sum_{(j^{sa}=l_{sa}+n-D)} \sum_{j_i=j^{sa}+s-j_{sa}} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\cdot)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \\
& \frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!} \cdot \\
& \frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot
\end{aligned}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$D + l_s + s - n - l_i + 1 \leq l \leq i \wedge l - 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_2: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f^{z^s} j_s^{j_{ik}, j_{sa}, j_i} = \sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\begin{aligned}
& \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{j_s = j^{sa} + j_{sa}^{lk} - j_{sa}}^{(l_s - j_s - l)} \sum_{j_{ik} = l_{sa} + n - D}^{(n_i - j_s - 1)} \sum_{j_i = j^{sa} + s - j_{sa}}^{(j_s - j_{sa}^{ik} + 1)} \\
& \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}^{n + \mathbb{k}_1} \sum_{n_{is} = n + \mathbb{k} - j_s + 1}^{(n_i - j_s - 1)} \sum_{n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}^{(n_i + j_s + j_{sa} - j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^s)!} \\
& \sum_{n_s = n_{sa} + j^{sa} - j_i - \mathbb{k}_3} \\
& \frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
\end{aligned}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$D + l_s + s - n - l_i + 1 \leq l \leq i - 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$\begin{aligned} & \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(l_{ik}-l-j_{sa}^{ik}+1)} \sum_{j_i=j_{sa}+s-j_{sa}}^{(l_s-l+1)} \sum_{n_{is}=n+k-j_s+1}^{(n_i-j_s)} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \\ & \sum_{n_{sa}=n+k_3-j_{sa}+1}^{(n_{ik}+j_{ik}-j_{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j_{sa}-j_i-k_3} \\ & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\ & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\ & \frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!} \cdot \\ & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\ & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \end{aligned}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_{ik}-l-j_{sa}^{ik}+2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(j_{sa}=j_i+j_{sa}-j_{sa}^{ik})} \sum_{(j_{sa}^{ik}=j_{sa}-j_{sa}^{ik})}^{(j_{sa}^{ik}=j_{sa}-j_{sa}^{ik})}$$

$$\sum_{n_i=n+k}^n \sum_{(n_i=n+k)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n_i-j_s-j_{ik}-k_1)}^{(n_{ik}=n_i-j_s-j_{ik}-k_1)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{sa}-k_2)}^{(n_{sa}=n_{ik}+j_{sa}-k_2)} \sum_{(n_{sa}+j_{sa}-j_i-k_3)}^{(n_{sa}+j_{sa}-j_i-k_3)}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j_{sa}^{ik} - j_i - k_2 - k_3 - 2 \cdot j_{sa}^s)!}{(n_i - k_1 - k_2 - k_3)!}$$

$$\frac{1}{(n + 2 \cdot j_s + j_{sa} - j_{sa}^{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{sa} - j_{sa}^{ik} > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{j_i=s+1}^{l_s+s-l}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{ik}+j_{ik}-j_{sa}^{ik}-\mathbb{k}_2)}^{(n_{ik}+j_{ik}-j_{sa}^{ik}-\mathbb{k}_2)} \sum_{(j^{sa}+1)}^{n_{sa}+j^{sa}-\mathbb{k}_3} \sum_{(j^{sa}+1)}^{n_{sa}+j^{sa}-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is})}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_2 - 1)!}{(j^{sa} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}^{(l_s-l+1)}$$

GÜLDENWA

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{\binom{(\cdot)}{j^{sa}=j_i+j_{sa}-s}} \sum_{j_i=l_s+s-l+1}^{l_i-l+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{\binom{(\cdot)}{n_{is}=n+l_k-j_s+1}}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n+l_k+l_{k_2}+l_{k_3}-j_{ik}-1}^{n_{is}+j_s-j_{ik}-l_{k_1}}$$

$$\sum_{\binom{(\cdot)}{n_{sa}=n+l_{k_3}-j^{sa}+1}}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})}$$

$$\sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-1}$$

$$\frac{(n_i-1)!}{(j_s-2)! \cdot (n_i-n_{is}+1)!}$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-j_{sa}-n_{is}+n_{ik}-j_{ik})!}$$

$$\frac{(n_{ik}-n_{sa}-l_{k_2}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_s-n_{sa}-j^{sa}-l_{k_2})!}$$

$$\frac{(n_{sa}-n_s-l_{k_3}-1)!}{(j_i-n_{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-l_{k_3})!}$$

$$\frac{(n_s-1)!}{(l_s+j_i-n-1)! \cdot (n-j_i)!}$$

$$\frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!}$$

$$\frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!}$$

$$\frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!}$$

$$\sum_{k=l}^{\binom{(\cdot)}{j_s=j_{ik}-j_{sa}^{ik}+1}}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{\binom{(\cdot)}{j^{sa}=j_i+j_{sa}-s}} \sum_{j_i=s+1}^{l_s+s-l}$$

$$\sum_{n_i=n+l_k}^n \sum_{\binom{(\cdot)}{n_{is}=n+l_k-j_s+1}}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}}$$

$$\frac{\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3} \binom{(\quad)}{\quad}}{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - k_1 - k_2 - k_3 - 2 \cdot j_{sa})!} \cdot \frac{1}{(n_i - n - k_1 - k_2 - k_3)!}$$

$$\frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - 1)!}{(D + j_s - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l \neq i \wedge l_i \leq D + s - n \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} - l_i + j_{sa} - s = j_{sa} \wedge$

$D \geq n < n \wedge l = k > 0 \wedge$

$j_{sa} < j_{sa}^l - 1 \wedge j_{sa}^{ik} < j_{sa} \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^l\} \wedge$

$s \geq 0 \wedge s = s + k_1$

$k_2 \cdot z = 3 \wedge k_1 + k_2 + k_3 \Rightarrow$

$$fz^{S_{j_s, j_{ik}, j_{sa}, j_i}} = \sum_{k=l}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)} \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(l_s+j_{sa}-l)} \sum_{(j^{sa}=j_{sa}+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n+k_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-k_3}$$

$$\begin{aligned}
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
& \frac{(n_s + j_i - n - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(n_s - l - 1)!}{(n_s - l - 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - j_{sa}^{ik} - 1)!}{(j_s + l_{ik} - l_s - 1)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(D + l_i)!}{(D + l_i - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=l}^{(l_s - l + 1)} \sum_{(j_s=2)} \\
& \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(l_{sa}-l+1)} \sum_{(j^{sa}=l_s+j_{sa}-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
\end{aligned}$$

$$\begin{aligned}
& \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{j_{sa} = j_{sa} + 1}^{(j_s - l)} \sum_{j_{sa} = j_{sa} + 1}^{(j_s - l)} \sum_{j_{sa} = j_{sa} + 1}^{(j_s - l)} \sum_{j_{sa} = j_{sa} + 1}^{(j_s - l)} \\
& \sum_{j_{ik} = j_{sa} + j_{sa}^{lk} - j_s}^{(j_s - l)} \sum_{j_{sa} = j_{sa} + 1}^{(j_s - l)} \sum_{j_i = j_{sa} + s - j_{sa}}^{(j_s - l)} \\
& \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}^{(n_i - 1)} \sum_{n_{is} = n + \mathbb{k} - j_s + 1}^{(n_i - 1)} \sum_{n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}^{(n_i - 1)} \sum_{n_s = n_{sa} + j^{sa} - j_i - \mathbb{k}_3}^{(n_i - 1)} \\
& \frac{(n_i + j_s + j_{sa} - j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!} \cdot \\
& \frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
\end{aligned}$$

$$D \geq n < n \wedge l \neq i \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{lk} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{lk} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$\begin{aligned}
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{(l_s - l + 1)} \sum_{(j_s=2)} \\
 & \sum_{j_{ik}=l_s + j_{sa}^{ik} - l + 1}^{l_{ik} - l + 1} \sum_{(j_{sa}=j_{ik} + j_{sa} - j_{sa}^{ik})} \sum_{(j_{sa} + s - j_{sa})} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_{sa})}^{(n_i - j_s + 1)} \sum_{(n_{ik}=n+k_2)}^{(n_{is} + j_s - k_1)} \\
 & \frac{(n_{ik} + j_{ik} - j_{sa}^{ik})! \cdot (n_{sa} + j_{sa} - j_i - k_1)!}{(n_{sa} + k_3 - j_{sa}^{ik})! \cdot (n_{sa} - j_i + 1)!} \cdot \frac{(n_{is} - 1)!}{(n_{is} - j_s + 1)!} \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(n_{is} + j_s - n_{ik} - j_{ik})!} \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{sa}^{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!} \\
 & \frac{(n_{sa} - n_s - k_3 - 1)!}{(j_{sa} - j_{sa}^{ik} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i - k_3)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} - \\
 & \sum_{k=l} \sum_{(j_s=j_{ik} - j_{sa}^{ik} + 1)}
 \end{aligned}$$

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$$\sum_{j_{ik}=j_{sa}^{lk}+1}^{l_s+j_{sa}^{lk}-l} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+lk}^n \sum_{(n_{is}=n+lk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-lk_2)} \sum_{n_s=n_{sa}+j_{sa}-j_i-lk_3}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j_{sa} - j_i - lk_1 - lk_2 - lk_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - lk_1 - lk_2 - lk_3)!}$$

$$\frac{(n + 2 \cdot j_s - j_{sa} - j_i - 2 \cdot j_{sa}^s)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_s - l)!}{(n - l_i)!}$$

$$(D) \frac{1}{(j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l \neq j_i \wedge l_i \leq j_i + s - n$
 $1 \leq j_s \leq j_{ik} - j_{sa}^{lk} + 1 \wedge j_s + j_{sa}^{lk} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$
 $j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - j_{sa}^{ik} + j_{sa} \leq j_i \leq n \wedge$
 $l_i - j_{sa}^{lk} + j_{sa}^{lk} \geq l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_i \wedge l_i + j_{sa} - s = l_{sa} \wedge$
 $D \geq n < n \wedge l = j_s > 0 \wedge$
 $j_{sa} < j_{sa} - 1 \wedge j_{sa}^{lk} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{lk} - 1 \wedge$
 $s: \{j_{sa}^s, lk_1, j_{sa}^{lk}, \dots, lk_2, j_{sa}^{ik}, \dots, lk_3, j_{sa}^i\} \wedge$
 $s \geq j_{sa} = s + lk \wedge$
 $lk_z: z = 3 \wedge lk_z = lk_1 + lk_2 + lk_3 \Rightarrow$

$$f_z^{S_{j_s, j_{ik}, j_{sa}, j_i}} = \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{lk}-1}^{l_{ik}-l+1} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{i_k}=n+l_k+l_{k_3}-j_{i_k}+1}^{n_{i_s}+j_s-j_{i_k}-l_{k_1}} \\
 & \sum_{(n_{s_a}=n+l_{k_3}-j^{s_a}+1)}^{(n_{i_k}+j_{i_k}-j^{s_a}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{s_a}+j^{s_a}-j_i-l_{k_3}} \\
 & \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \\
 & \frac{(n_{i_s} - n_{i_k} - 1)!}{(j_{i_k} - j_s - 1)! \cdot (n_{i_s} - n_{i_k} - j_{i_k})!} \cdot \\
 & \frac{(n_{i_k} - n_{s_a} - 1)!}{(j^{s_a} - j_{i_k} - 1)! \cdot (n_{i_k} + j_{i_k} - n_{s_a} - j^{s_a} - l_{k_2})!} \cdot \\
 & \frac{(n_{s_a} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{i_k} + j^{s_a} - n_s - l_{k_3})!} \cdot \\
 & \frac{(n_s - 1)!}{(n_i + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{i_k} - l_s - j_{s_a}^{i_k} + 1)!}{(j_s - j_{i_k} - j_{i_k} - l_s)! \cdot (j_{i_k} - j_s - j_{s_a}^{i_k} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}
 \end{aligned}$$

$$\begin{aligned}
 & \sum_{j_{i_k}=j_s+j_{s_a}^{i_k}-1} \sum_{(j^{s_a}=j_{i_k}+j_{s_a}-j_{s_a}^{i_k})}^{()} \sum_{j_i=j^{s_a}+s-j_{s_a}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{i_k}=n_{i_s}+j_s-j_{i_k}-l_{k_1}} \\
 & \sum_{(n_{s_a}=n_{i_k}+j_{i_k}-j^{s_a}-l_{k_2})}^{()} \sum_{n_s=n_{s_a}+j^{s_a}-j_i-l_{k_3}}
 \end{aligned}$$

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$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^i)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!} \cdot \frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^i)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!} \cdot \frac{(D - l)!}{(D + j_i - n - l_i)! (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa}^{ik}$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s \leq l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{ik} - 1 < j_{sa} - 1$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_2: z \geq 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)} \sum_{j_{ik}=j^{sa} + j_{sa}^{ik} - j_{sa}}^{()} \sum_{(j^{sa}=j_i + j_{sa} - s)} \sum_{j_i=l_i + n - D}^{l_s + s - l} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\begin{aligned}
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
& \frac{(n_s + j_i - n - 1)!}{(n_s + j_i - n - 1)! \cdot (j_i - 1)!} \cdot \\
& \frac{(n_s - l - 1)!}{(n_s - l - 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - j_{sa}^{ik} - 1)!}{(j_s + l_{ik} - l_s - 1)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=l}^{(l_s - l + 1)} \sum_{(j_s=2)} \\
& \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^n \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\binom{(\quad)}{}} \sum_{j_i=l_s+s-l+1}^{l_i-l+1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
\end{aligned}$$

$$\begin{aligned}
& \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_s}^{(n_i-1)} \sum_{j_{sa}=j_i+j_{sa}-s}^{l_s+s-l} \sum_{j_i=l_i+n-D}^{(n_i-1)} \\
& \sum_{n+l_k}^{(n_i-1)} \sum_{n_{is}=n+l_k-j_s+1}^{(n_i-1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(n_i-1)} \\
& \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(n_i-1)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}^{(n_i-1)} \\
& \frac{(n_i + j_s + j_{sa} - j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!} \cdot \\
& \frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
\end{aligned}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$fz^S j_s, j_{ik}, j_{sa}^{ik} = \sum_{l=1}^{k+1} \sum_{(j_s=2)}^{k+1} \sum_{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}^{l_s+j_{sa}} \sum_{n_i=n}^{n} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\begin{aligned}
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=l}^{(l_s - l + 1)} \sum_{(j_s=2)}^{(l_s - l + 1)} \\
& \sum_{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}^{(l_i+j_{sa}-l-s+1)} \sum_{(j^{sa}=l_s+j_{sa}-l)}^{(l_i+j_{sa}-l-s+1)} \sum_{(j_{sa}^{ik}=j_{sa}-j_{sa}^{ik})} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{is}+j_s-j_{ik}-l)}^{(n_{is}+j_s-j_{ik}-l)} \\
& \sum_{(n_{ik}+j_{sa}-l_k-2)}^{(n_{ik}+j_{sa}-l_k-2)} \sum_{(n_{is}+j_s-j_{ik}-l)}^{(n_{is}+j_s-j_{ik}-l)} \sum_{(n_s=n-j_i+1)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \\
& \frac{(n_{ik} - n_{sa} - l_k - 2 - 1)!}{(j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_k - 2)!} \\
& \frac{(n_{sa} - n_s - l_k - 3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - l_k - 3)!} \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -
\end{aligned}$$

$$\sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{lk}-j_{sa}}^{(l_s+j_{sa}-l)} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)} \sum_{j_i=j^{sa}+s-j_{sa}}^{(\cdot)}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-k_1}^{(\cdot)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{(\cdot)} \sum_{(n_{sa}=n_{sa}+j^{sa}-j_i)}^{(\cdot)}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - k_2 - j_{sa} - 2 \cdot j_{sa}^s)!}{(n_i + n - k_1 - k_2 - j_{sa} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq 1 \wedge l_s \leq D - n - 1 \wedge$$

$$1 < j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_i + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_i \leq j_i + j_{sa} - j_{sa} \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n - 1 \leq D + j_i + s - n - 1 \wedge$$

$$D > n < n \wedge I = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s \in \{j_{sa} - k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$fz^{\mathcal{S}}_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+s-}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}}$$

$$\sum_{(n_{ik}+j_{ik}-j^{sa}-l_{k_2}-j_i-l_{k_3})}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2}-j_i-l_{k_3})} \sum_{(n_{sa}=n+l_{k_3}-j_i+1)}^{(n_{sa}=n+l_{k_3}-j_i+1)} \sum_{n_s=n-j_i+1}^{(n_{sa}=n+l_{k_3}-j_i+1)}$$

$$\frac{(n_{is}-l_{k_1}-1)!}{(j_s-2)! \cdot (n_{is}-j_s+1)!}$$

$$\frac{(n_{is}-l_{k_1}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}-j_s-n_{ik}-j_{ik})!}$$

$$\frac{(n_{ik}-n_{sa}-l_{k_2}-1)!}{(j_{ik}-j_{ik}-1)! \cdot (n_{ik}-j_{ik}-n_{sa}-j^{sa}-l_{k_2})!}$$

$$\frac{(n_{sa}-n_s-l_{k_3}-1)!}{(j_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-l_{k_3})!}$$

$$\frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!}$$

$$\frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!}$$

$$\frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!}$$

$$\frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} +$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=l_s+j_{sa}^{ik}-l-s+1}^{l_i+j_{sa}^{ik}-l-s+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

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$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{i_k}=n+l_{k_2}+l_{k_3}-j_{i_k}+1}^{n_{i_s}+j_s-j_{i_k}-l_{k_1}} \\
 & \sum_{(n_{s_a}=n+l_{k_3}-j^{s_a}+1)}^{(n_{i_k}+j_{i_k}-j^{s_a}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{s_a}+j^{s_a}-j_i-l_{k_3}} \\
 & \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \\
 & \frac{(n_{i_s} - n_{i_k} - 1)!}{(j_{i_k} - j_s - 1)! \cdot (n_{i_s} - n_{i_k} - j_{i_k})!} \cdot \\
 & \frac{(n_{i_k} - n_{s_a} - 1)!}{(j^{s_a} - j_{i_k} - 1)! \cdot (n_{i_k} + j_{i_k} - n_{s_a} - j^{s_a} - l_{k_2})!} \cdot \\
 & \frac{(n_{s_a} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{i_k} + j^{s_a} - n_s - l_{k_3})!} \cdot \\
 & \frac{(n_s - 1)!}{(n_i + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{i_k} - l_s - j_{s_a}^{i_k} + 1)!}{(j_s - j_{i_k} - j_{i_k} - l_s)! \cdot (j_{i_k} - j_s - j_{s_a}^{i_k} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot
 \end{aligned}$$

$$\sum_{k=l}^{\binom{()}{}} \sum_{(j_s=j_{i_k}-j_{s_a}^{i_k}+1)}^{\binom{()}{}}$$

$$\sum_{j_{i_k}=l_i+n+j_{s_a}^{i_k}-D-s}^{l_s+j_{s_a}^{i_k}-l} \sum_{(j^{s_a}=j_{i_k}+j_{s_a}-j_{s_a}^{i_k})}^{\binom{()}{}} \sum_{j_i=j^{s_a}+s-j_{s_a}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{i_k}=n_{i_s}+j_s-j_{i_k}-l_{k_1}}$$

$$\sum_{(n_{s_a}=n_{i_k}+j_{i_k}-j^{s_a}-l_{k_2})}^{\binom{()}{}} \sum_{n_s=n_{s_a}+j^{s_a}-j_i-l_{k_3}}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!} \cdot \frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!} \cdot \frac{(D - l)!}{(D + j_i - n - l_i)! (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa}^{ik}$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s \leq l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{ik} - 1 < j_{sa} - 1$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_2: z \geq 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fz_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_i+n-D-s)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_i+j_{sa}^{ik}-l-s+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
 & \frac{(n_s + \dots - n - 1)!}{(n_s + \dots - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(n_s - l - 1)!}{(n_s - l - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - l_s) \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + \dots - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l} \sum_{(j_s = l_i + n - D - s + 1)}^{(l_s - l + 1)} \\
 & \sum_{j_{ik} = j_s + j_{sa}^{ik} - 1}^{l_i + j_i - l - s + 1} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})} \sum_{j_i = j^{sa} + s - j_{sa}} \\
 & \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{(n_{ik} = n + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1)}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \\
 & \sum_{(n_{sa} = n + \mathbb{k}_3 - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = n - j_i + 1}^{n_{sa} + j^{sa} - j_i - \mathbb{k}_3} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
 \end{aligned}$$

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$$\begin{aligned}
& \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{k=j_s+j_{sa}^{ik}-1}^{(l_s-l+1)} \sum_{l_i=l_s-l+1}^{(l_s-l+1)} \sum_{D-s+1}^{(l_s-l+1)} \\
& \sum_{j_s=j_s+j_{sa}^{ik}-1}^{(n_i-1)} \sum_{j_{ik}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{(n_i-1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{(n_i-1)} \\
& \sum_{n+l_k}^{(n_i-1)} \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(n_i-1)} \\
& \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(n_i-1)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}^{(n_i-1)} \\
& \frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!} \cdot \\
& \frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
\end{aligned}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$D + l_s + s - n - l_i + 1 \leq l \leq i \wedge l - 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$\sum_{j_{ik} = j_{sa} + j_{sa}^{ik} - j_{sa}}^{(l_i + j_{sa} - s + 1)} \sum_{j_i = j^{sa} + s - j_{sa}}^{(l_s - l)} \sum_{(j_s = 2)}^{(l_s - l)}$$

$$\sum_{n+k}^{(n_i - j_s)} \sum_{(n_{is} = n + k - j_s + 1)}^{n_{is} + j_s - j_{ik} - k_1}$$

$$\sum_{(n_{sa} = n + k_3 - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - k_2)} \sum_{n_s = n - j_i + 1}^{n_{sa} + j^{sa} - j_i - k_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!}$$

$$\frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l}^{(\)} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik} = j_{sa} + j_{sa}^{ik} - j_{sa}}^{(l_s + j_{sa} - l)} \sum_{(j_{sa} = l_i + n + j_{sa} - D - j_{sa}^{ik} - j_{sa})}$$

$$\sum_{n_i = n + k}^n \sum_{(n_i = n + k)}^{(n_i - j_s + 1)} \sum_{(n_{ik} = j_s - j_{ik} - k_1)}$$

$$\sum_{(n_{sa} = n_{ik} + j_{sa} - k_2)}^{(\)} \sum_{(n_{sa} = n_{ik} + j_{sa} - k_2)} \sum_{(n_{sa} = n_{ik} + j_{sa} - k_2)}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j_{sa}^{ik} - j_i - k_2 - k_3 - 2 \cdot j_{sa}^s)!}{(n_i + j_{sa} - k_1 - k_2 - k_3)!}$$

$$\frac{1}{(n + 2 \cdot j_s + j_{sa} - j_{sa}^{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$s \geq 6 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$fz^S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{j_i=l_{sa}+n_{sa}-D-j_{sa}}^{l_s+s-l}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_i+1)}^{(n_i-j_s+1)} \sum_{(n_{sa}=n+\mathbb{k}_2+\mathbb{k}_3-j_i+1)}^{(n_i-j_s+1)}$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_s-2)! \cdot (n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_i-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!}$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_i-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!} \cdot \frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j^{sa}-j_i-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}$$

$$\frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!}$$

$$\frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \cdot \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} +$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}^{(l_s-l+1)}$$

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$$\sum_{j_{ik}=j^{sa}+j_{sa}^{lk}-j_{sa}} \sum_{\binom{(\cdot)}{j^{sa}=j_i+j_{sa}-s}} \sum_{j_i=l_s+s-l+1}^{l_s+s-l-j_{sa}+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{\binom{(n_i-j_s+1)}{n_{is}=n+l_k-j_s+1}} \sum_{n_{ik}=n+l_k+l_{k_2}+l_{k_3}-j_{ik}-1}^{n_{is}+j_s-j_{ik}-l_{k_1}}$$

$$\sum_{\binom{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})}{n_{sa}=n+l_{k_3}-j^{sa}+1}} \sum_{\binom{(n_{sa}+j^{sa}-j_i-1)}{n_s=n-j_i+1}}$$

$$\frac{\binom{(n_i-1)}{(j_s-2)!(n_i-n_{is}+1)!}}{\binom{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-j_{sa}-n_{is}+n_{ik}-j_{ik})!}}$$

$$\frac{\binom{(n_{ik}-n_{sa}-l_{k_2}-1)}{(j^{sa}-j_{ik}-1)!(n_{ik}+j_s-n_{sa}-j^{sa}-l_{k_2})!}}{\binom{(n_{sa}-n_s-l_{k_3}-1)!}{(j_i-n_{sa}-1)!(n_{sa}+j^{sa}-n_s-j_i-l_{k_3})!}}$$

$$\frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!}$$

$$\frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!}$$

$$\frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!}$$

$$\frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!}$$

$$\sum_{k=l}^{\binom{(\cdot)}{j_s=j_{ik}-j_{sa}^{ik}+1}}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{lk}-j_{sa}} \sum_{\binom{(\cdot)}{j^{sa}=j_i+j_{sa}-s}} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_s+s-l}$$

$$\sum_{n_i=n+l_k}^n \sum_{\binom{(n_i-j_s+1)}{n_{is}=n+l_k-j_s+1}} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3} \frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - k_1 - k_2 - k_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - k_1 - k_2 - k_3)!} \cdot \frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - 1)!}{(D + j_{sa} - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} - l_i + j_{sa} - s = l_{sa} \wedge$

$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - 1 \wedge$

$D \geq n < n \wedge l = k > 0 \wedge$

$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^i = j_{sa}^{ik} - 1$

$s: \{j_{sa}^{ik}, j_{sa}^i, j_{sa}^s, \dots, k_2, j_{sa}^s, \dots, k_3, j_{sa}^i\}$

$s \geq 6 \wedge s = s - k \wedge$

$k_z = 3 \wedge k = k_1 + k_2 + k_3$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_s+j_{sa}-l)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}$$

$$\begin{aligned}
& \sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-k_2) \\ (n_{sa}=n+k_3-j^{sa}+1)}} \sum_{\substack{n_{sa}+j^{sa}-j_i-k_3 \\ n_s=n-j_i+1}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_s)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_s - k_2)!} \cdot \\
& \frac{(n_{sa} - n_{sa} - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!} \cdot \\
& \frac{(n_s - 1)!}{(n - j_i - 1)!} \cdot (n - j_i)! \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - j_{ik} - j_{sa}^{ik} + 1)!}{(j_s + j_{ik} - l - 1)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)} \\
& \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=l_s+j_{sa}-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}} \\
& \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \\
& \sum_{(n_{sa}=n+k_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-k_3} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}
\end{aligned}$$

$$\begin{aligned}
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa} + 1)!}{(j_s + l_{ik} - j_{sa} - 1)! \cdot (j_{ik} - j_{sa} - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{k=l}^{(\cdot)} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\cdot)} \\
& \sum_{j_{ik} = j_{sa} + j_{sa}^{lk} - j_{sa}}^{(l_s + j_{sa} - l)} \sum_{(j^{sa} = l_{sa} + n - D)} \sum_{j_i = j^{sa} + s - j_{sa}} \\
& \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1} \\
& \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\cdot)} \sum_{n_s = n_{sa} + j^{sa} - j_i - \mathbb{k}_3} \\
& \frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!} \cdot \\
& \frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
\end{aligned}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$f_{z, \dots, j_{ik}, j_{sa}, j_{sa}^i} = \sum_{k=l}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)}^{(j_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik}=l_{sa} + \dots}^{l_s + j_{sa} - 1} \sum_{(j^{sa}=j_{ik} + j_{sa} - j_{sa}^{ik})}^{(j_i = j^{sa} + s - j_{sa})} \sum_{(n_i = n + k)}^{(n_{is} = n + k - j_s + 1)} \sum_{(n_{ik} = n + k_2 + k_3 - j_{ik} + 1)}^{(n_i - j_s + 1)}$$

$$\sum_{(n_{sa} = n + k_3 - j_{sa} + 1)}^{(n_{is} + j_s - j_{ik} - k_1)} \sum_{(n_s = n - j_i + 1)}^{(n_{ik} + j_{ik} - j^{sa} - k_2)}$$

$$\sum_{(n_{sa} = n + k_3 - j_{sa} + 1)}^{(n_{sa} + j^{sa} - j_i - k_3)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!}$$

$$\frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l}^{j_s - l + 1} (j_s - k - l + 1)$$

$$\sum_{j_{ik}=l_s+j_{sa}^{ik}-1}^{l_{sa}+j_{sa}^{ik}-l-j_{sa}} (j_{sa}=j_{sa}-j_{sa}^{ik}) (j_i - j_s - j_{sa})$$

$$\sum_{n_{ik}+l_k}^n (n_{is}=n+l_k-1) (j_s+1) \sum_{n_{ik}=n+l_k+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}}$$

$$\sum_{(n_{sa}=n+l_{k_3}-j_{sa}^{ik_2})}^{(n_{sa}=n+l_{k_3}-j_{sa}^{ik_2})} \sum_{n_s=n-j_i+1}^{n_{sa}+j_{sa}-j_i-l_{k_3}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

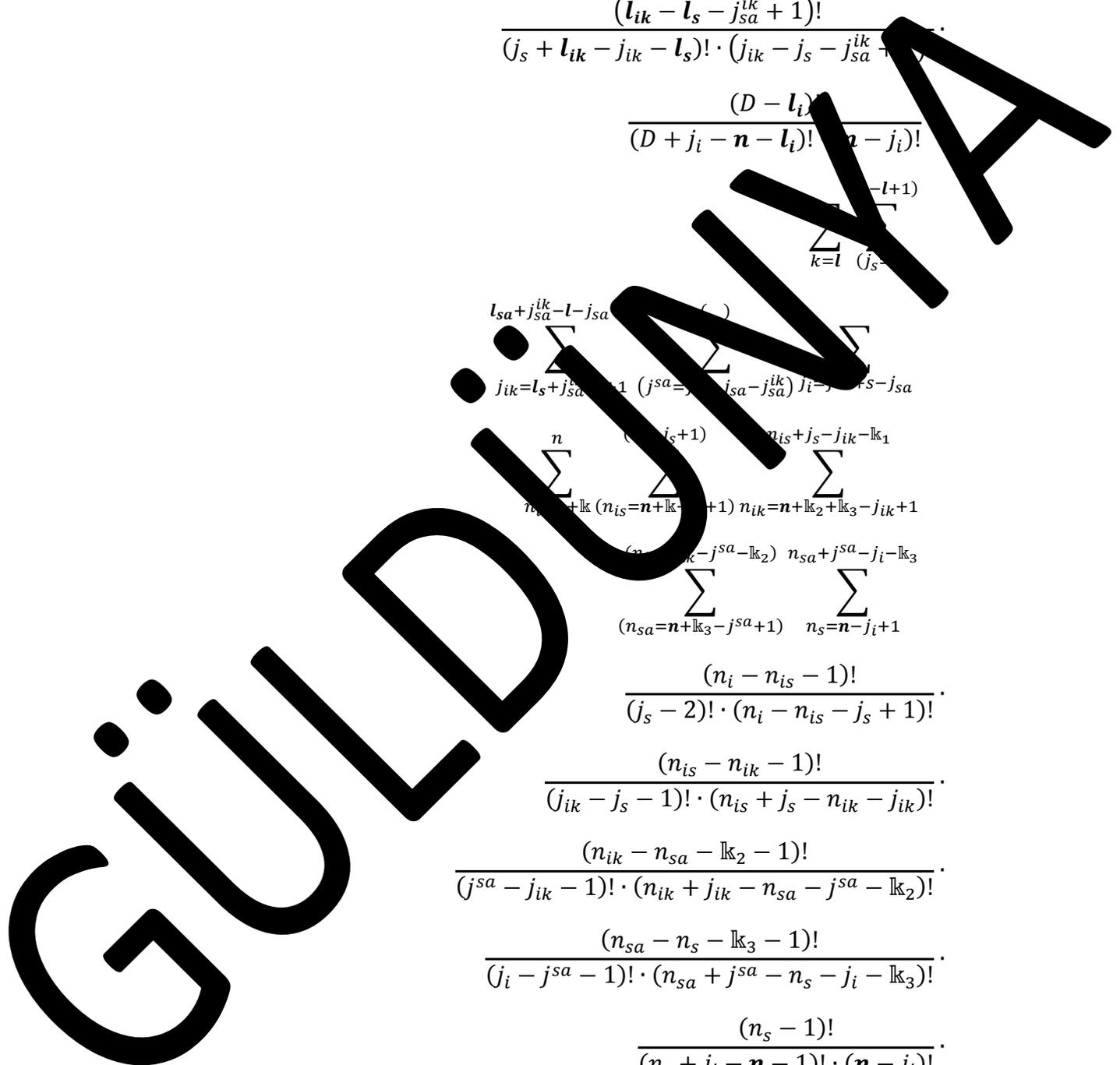
$$\frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!}$$

$$\frac{(n_{sa} - n_s - l_{k_3} - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - l_{k_3})!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$



$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)} \sum_{j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa}}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\cdot)} \sum_{j_{ik}=j_{sa}+s-j_{sa}}^{(\cdot)} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_{sa}^{ik})}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s}^{(\cdot)} \sum_{(n_{ik}+j_{sa}^{ik}-k_2) \leq n_{is}}^{(\cdot)} \sum_{(n_{ik}-k_1) \leq n_{is}}^{(\cdot)} \sum_{(n_{ik}-k_3) \leq n_{is}}^{(\cdot)} \frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - k_1 - k_2 - k_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - k_1 - k_2 - k_3)!} \frac{1}{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!} \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq l \wedge l_s \geq D - n - 1 \wedge$$

$$1 \leq j_{ik} - j_{sa}^{ik} + j_s + j_{sa} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_{sa} + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s + l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - l_{sa} \leq l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$n - l_s - l_i \wedge I = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$fz^S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_{sa}+n-D-j_{sa})} \sum_{(j_s=2)}^{(l_{sa}+n-D-j_{sa})}$$

$$\sum_{j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa}}^{l_{sa}+j_{sa}^{ik}-l-j_{sa}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j^{sa}+s-j_{sa}}^{()}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}-\mathbb{k}-\mathbb{k}_1}^{n_{is}+j_{sa}-\mathbb{k}-\mathbb{k}_1} \sum_{j_{ik}+1}^{()}$$

$$\sum_{(j^{sa}+1)}^{(n_{ik}+j_{ik}-\mathbb{k}_2)} \sum_{(n_{sa}+j_{sa}-\mathbb{k}_3)}^{(n_{sa}+j_{sa}-\mathbb{k}_3)}$$

$$\frac{(n_i - n_{is})}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_2 - 1)!}{(j^{sa} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=l}^{(l_s-l-1)} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_s-l-1)}$$

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$$\begin{aligned}
 & \sum_{j_{ik}=j_s+j_{sa}^{lk}-1}^{l_{sa}+j_{sa}^{lk}-l-j_{sa}+1} \binom{(\quad)}{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{lk}} \sum_{j_i=j_{sa}+s-j_{sa}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k+l_{k_2}+l_{k_3}-j_i}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n+l_{k_3}-j_{sa}+1)}^{(n_{ik}+j_{ik}-j_{sa}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{sa}+j_{sa}-j_i-l_{k_1}} \\
 & \frac{(n_i-1)!}{(j_s-2)! \cdot (n_i-n_{is}-1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \\
 & \frac{(n_{ik}-n_{sa}-l_{k_2}-1)!}{(j_{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j_{sa}-l_{k_2})!} \cdot \frac{(n_{sa}-l_{k_3}-1)!}{(j_i-j_{sa}-1)! \cdot (n_{sa}+j_{sa}-n_s-j_i-l_{k_3})!} \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \\
 & \frac{(l_{ik}-l_s-j_{sa}^{lk}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{lk}+1)!} \cdot \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!}
 \end{aligned}$$

$$\sum_{k=l}^{(l_s-l-1)} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}$$

$$\begin{aligned}
 & \sum_{j_{ik}=j_s+j_{sa}^{lk}-1} \binom{(\quad)}{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{lk}} \sum_{j_i=j_{sa}+s-j_{sa}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}}
 \end{aligned}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3} (n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - k_1 - k_2 - k_3 - 2 \cdot j_{sa}^s)! \cdot \frac{1}{(n_i - n - k_1 - k_2 - k_3)!} \cdot \frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - 1)!}{(D + j_s - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} - l_i + j_{sa} - s = l_{sa} \wedge$

$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - 1 \wedge$

$D \geq n < n \wedge l = k > 0 \wedge$

$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^i = j_{sa}^{ik} - 1$

$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\}$

$s \geq 6 \wedge s = s + k \wedge$

$k_2 = 3 \wedge k = k_1 + k_2 + k_3$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)} (j_s - 2)!$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{()} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{l_s+s-l} \sum_{j_i=l_{ik}+s+n-D-j_{sa}^{ik}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1}$$

$$\begin{aligned}
& \sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-k_2) \\ (n_{sa}=n+k_3-j^{sa}+1)}} \sum_{\substack{n_{sa}+j^{sa}-j_i-k_3 \\ n_s=n-j_i+1}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_s)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_s - k_2)!} \cdot \\
& \frac{(n_{sa} - n_{sa} - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!} \cdot \\
& \frac{(n_s - 1)!}{(n - j_i - 1)!} \cdot (n - j_i)! \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - j_{ik} - j_{sa}^{ik} + 1)!}{(j_s + j_{ik} - l - 1)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)} \\
& \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{\binom{()}{j^{sa}=j_i+j_{sa}-s}} \sum_{l_{ik}+s-l-j_{sa}^{ik}+1} \\
& \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \\
& \sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-k_2) \\ (n_{sa}=n+k_3-j^{sa}+1)}} \sum_{\substack{n_{sa}+j^{sa}-j_i-k_3 \\ n_s=n-j_i+1}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}
\end{aligned}$$

$$\begin{aligned}
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa} + 1)!}{(j_s + l_{ik} - j_{sa} - 1)! \cdot (j_{ik} - j_{sa} - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)} \\
& \sum_{j_{ik}=j_{sa}^{ik}-j_{sa}}^{(\cdot)} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\cdot)} \sum_{j_i=l_{ik}+s+n-D-j_{sa}^{ik}}^{l_s+s-l} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\cdot)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \\
& \frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!} \cdot \\
& \frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
\end{aligned}$$

$$D \geq n < n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$f_{z, j_{ik}, j_{sa}, j_{sa}^{ik}} = \sum_{k=l}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)}^{(j_s=2)}$$

$$\sum_{(l_s+1) - l}^{(l_s+1) - l} \sum_{j_{ik}=j^{sa} + j_{sa} - j_{sa}^{ik} (j^{sa}=l_{ik} + n + j_{sa} - D - j_{sa}^{ik})}^{j_i=j^{sa} + s - j_{sa}}$$

$$\sum_{i=n+k}^{(n_i - j_s + 1)} (n_{is} = n + k - j_s + 1) n_{ik} = n + k_2 + k_3 - j_{ik} + 1$$

$$\sum_{(n_{ik} + j_{ik} - j^{sa} - k_2)}^{(n_{ik} + j_{ik} - j^{sa} - k_2)} \sum_{(n_{sa} = n + k_3 - j^{sa} + 1)}^{n_{sa} + j^{sa} - j_i - k_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!}$$

$$\frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!}$$

$$\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}^{l-1} \sum_{j_s=0}^{j_s-l+1} \sum_{j_{ik}=j_{sa}^{ik}+j_{sa}^{ik}}^{j_{sa}^{ik}+j_{sa}^{ik}} \sum_{j_{sa}=j_{sa}^{ik}-l+1}^{j_{sa}^{ik}-l+1} \sum_{j_i=j_{sa}^{ik}+j_{sa}^{ik}}^{j_{sa}^{ik}+j_{sa}^{ik}} \sum_{j_s=0}^{j_s-l+1} \sum_{j_{ik}=j_{sa}^{ik}+j_{sa}^{ik}}^{j_{sa}^{ik}+j_{sa}^{ik}} \sum_{j_{sa}=j_{sa}^{ik}-l+1}^{j_{sa}^{ik}-l+1} \sum_{j_i=j_{sa}^{ik}+j_{sa}^{ik}}^{j_{sa}^{ik}+j_{sa}^{ik}} \\
 & \sum_{n_{ik}=n+l_k}^n \sum_{n_{is}=n+l_k-1}^{n_{is}+1} \sum_{n_{ik}=n+l_k-1}^{n_{is}+j_s-j_{ik}-l_k-1} \sum_{n_{ik}=n+l_k-1}^{n_{ik}=n+l_k-1} \sum_{n_{ik}=n+l_k-1}^{n_{ik}=n+l_k-1} \sum_{n_{ik}=n+l_k-1}^{n_{ik}=n+l_k-1} \sum_{n_{ik}=n+l_k-1}^{n_{ik}=n+l_k-1} \sum_{n_{ik}=n+l_k-1}^{n_{ik}=n+l_k-1} \sum_{n_{ik}=n+l_k-1}^{n_{ik}=n+l_k-1} \\
 & \sum_{(n_{sa}=n+l_k-1-j_{sa}-l_k-2)}^{(n_{sa}=n+l_k-1-j_{sa}-l_k-2)} \sum_{n_{sa}=j_{sa}-j_i-l_k-3}^{n_{sa}=j_{sa}-j_i-l_k-3} \sum_{(n_{sa}=n+l_k-1-j_{sa}+1)}^{(n_{sa}=n+l_k-1-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} - l_k - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_k - 1)!} \cdot \\
 & \frac{(n_{sa} - n_s - l_k - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - l_k - 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)!} \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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$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)} \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(l_s+j_{sa}-l)} \sum_{(j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik})}^{(n_i+j_s+1)} \sum_{(n_i=n+l_k)}^n \sum_{(n_{is}=n+l_k-1)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n_{is}+j_s-l_k)}^{(n_i-j_i-l_{k_3})} \frac{(n_i+2 \cdot j_s+j_{sa}-j^{sa}-j_i-l_{k_1}-l_{k_2}-l_{k_3}-2 \cdot j_{sa}^s)!}{(n_i-n-l_{k_2}-l_{k_3}-1)!} \frac{1}{(n_i+2 \cdot j_s+j_{sa}-j^{sa}-j_i-2 \cdot j_{sa}^s)!} \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!}$$

$$D \geq n < n \wedge l < l \wedge l_s \leq D - n - 2 \wedge$$

$$1 \leq j_{ik} \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j^{sa} + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s - j_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa}^{ik} - l_{ik} \leq l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1 \wedge$$

$$n > n - l \wedge l = l_k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, l_{k_1}, j_{sa}^{ik}, \dots, l_{k_2}, j_{sa}, \dots, l_{k_3}, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + l_k \wedge$$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j^{sa}+s-j_{sa}}^{()}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_1}^{n_{is}+j_s-\mathbb{k}-\mathbb{k}_1}$$

$$\sum_{(n_{ik}+j_{ik}-j_{sa}^{ik}-\mathbb{k}_2)}^{(n_{ik}+j_{ik}-j_{sa}^{ik}-\mathbb{k}_2)} \sum_{(n_{sa}+j^{sa}-j_{sa}^{ik}-\mathbb{k}_2)}^{(n_{sa}+j^{sa}-j_{sa}^{ik}-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is})}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_2 - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}^{(l_s-l+1)}$$

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$$\begin{aligned}
 & \sum_{j_{ik}=l_s+j_{sa}^{ik}-l+1}^{l_{ik}-l+1} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j_{sa}+s-j_{sa}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k+l_3-j_i}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n+l_k+l_3-j_{sa}+1)}^{(n_{ik}+j_{ik}-j_{sa}-l_{k_2})} \sum_{(n_{sa}+j_{sa}-j_i)} \\
 & \frac{(n_i-1)!}{(j_s-2)!(n_i-n_{is}+1)!} \cdot \\
 & \frac{(n_{is}-n_{ik}+1)!}{(j_{ik}-j_s+1)!(n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
 & \frac{(n_{ik}-n_{sa}-l_{k_2}-1)!}{(j_{sa}-j_{ik}-1)!(n_{ik}+j_s-n_{sa}-j_{sa}-l_{k_2})!} \cdot \\
 & \frac{(n_{sa}-n_s-l_{k_3}-1)!}{(j_i-j_{sa}-1)!(n_{sa}+j_{sa}-n_s-j_i-l_{k_3})!} \cdot \\
 & \frac{(n_s-1)!}{(l_s+j_i-n-1)!(n-j_i)!} \cdot \\
 & \frac{(l_s-l-1)!}{(l_s-j_s-l+1)!(j_s-2)!} \cdot \\
 & \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)!(j_{ik}-j_s-j_{sa}^{ik}+1)!} \cdot \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)!(n-j_i)!} \cdot
 \end{aligned}$$

$$\sum_{k=l} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_s+j_{sa}^{ik}-l} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}}$$

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$$\frac{\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3} \binom{(\quad)}{\quad}}{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - k_1 - k_2 - k_3 - 2 \cdot j_{sa})!} \cdot \frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa})!} \cdot \frac{(l_s - l + 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l + 1)!}{(D + j_s - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} - l_i + j_{sa} - s = j_{sa} \wedge$

$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - 1 \wedge$

$D \geq n < n \wedge l = k > 0 \wedge$

$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^i = j_{sa}^{ik} - 1$

$s: \{j_{sa}^{s_1}, j_{sa}^{s_2}, \dots, k_2, j_{sa}^{s_3}, \dots, k_3, j_{sa}^i\}$

$s \geq 6 \wedge s = s + k \wedge$

$k_2 = 3 \wedge k = k_1 + k_2 + k_3$

$$fz_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_{ik}+n-D-j_{sa}^{ik})} \sum_{(j_s=2)} \binom{(\quad)}{\quad}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-l+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1}$$

$$\begin{aligned}
 & \sum_{(n_{sa}=n+l_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-l_3} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_s)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_s - l_2)!} \cdot \\
 & \frac{(n_{sa} - n_{is} - l_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - l_3)!} \cdot \\
 & \frac{(n_s - 1)!}{(n - j_i - 1)!} \cdot (n - j_i)! \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - j_{ik} - j_{sa}^{ik} + 1)!}{(j_s + j_{ik} - l_{ik} - 1)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)} \\
 & \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{l_{ik}-l+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+s-j_{sa}} \\
 & \sum_{n_i=n+l_3}^n \sum_{(n_{is}=n+l_3-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_2+l_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_1} \\
 & \sum_{(n_{sa}=n+l_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-l_3} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
 \end{aligned}$$

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$$\begin{aligned}
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa} + 1)!}{(j_s + l_{ik} - j_s - 1)! \cdot (j_{ik} - j_{sa} - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{k=l}^{(l_s - l + 1)} \sum_{(j_s = l_{ik} + n - D - j_{sa}^{ik} + 1)} \\
& \sum_{j_{ik} = n_s + j_{sa}^{ik} - 1}^{(j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})} \sum_{j_i = j^{sa} + s - j_{sa}}^{(j_i = j^{sa} + s - j_{sa})} \\
& \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1} \\
& \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})} \sum_{n_s = n_{sa} + j^{sa} - j_i - \mathbb{k}_3} \\
& \frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!} \cdot \\
& \frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
\end{aligned}$$

$$D \geq n < n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

$$D + l_s + s - n - l_i + 1 \leq l \leq i - 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_{z^s} = f_{j_{ik}, j_{sa}, j_i} = \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}$$

$$= \sum_{j^{sa}+j_{sa}^{ik}-j_{sa}}^{(j_s)} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(l_i-l+1)} \sum_{j_i=l_i+n-D}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

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$$\begin{aligned}
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{l=1}^{l_s} \sum_{j_s=j_{ik}-j_{sa}^{ik}}^{j_s=j_{ik}-j_{sa}^{ik}+l-1} \sum_{j_i=j_i+j_{sa}-s}^{j_i=j_i+j_{sa}-s+l-1} \sum_{j_{ik}=j_{ik}-j_{sa}^{ik}}^{j_{ik}=j_{ik}-j_{sa}^{ik}+l-1} \\
& \sum_{n+l_k}^n \sum_{n_{is}=n+l_k-j_s+1}^{n_{is}=n+l_k-j_s+1} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}}^{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}} \\
& \sum_{n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-l_{k_2}}^{n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-l_{k_2}} \sum_{n_s=n_{sa}+j_{sa}^{ik}-j_i-l_{k_3}}^{n_s=n_{sa}+j_{sa}^{ik}-j_i-l_{k_3}} \\
& \frac{(n_i + j_i + j_s - j_{sa}^{ik} - j_i - l_{k_1} - l_{k_2} - l_{k_3} - 2 \cdot j_{sa}^s)!}{(n_i - n - l_{k_1} - l_{k_2} - l_{k_3})!} \cdot \\
& \frac{1}{(n + 2 \cdot j_s + j_{sa}^{ik} - j_{sa}^{ik} - j_i - 2 \cdot j_{sa}^s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
\end{aligned}$$

$$n \geq n < n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

$$D + l_s + s - n - l_i + 1 \leq l \leq l_i - 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

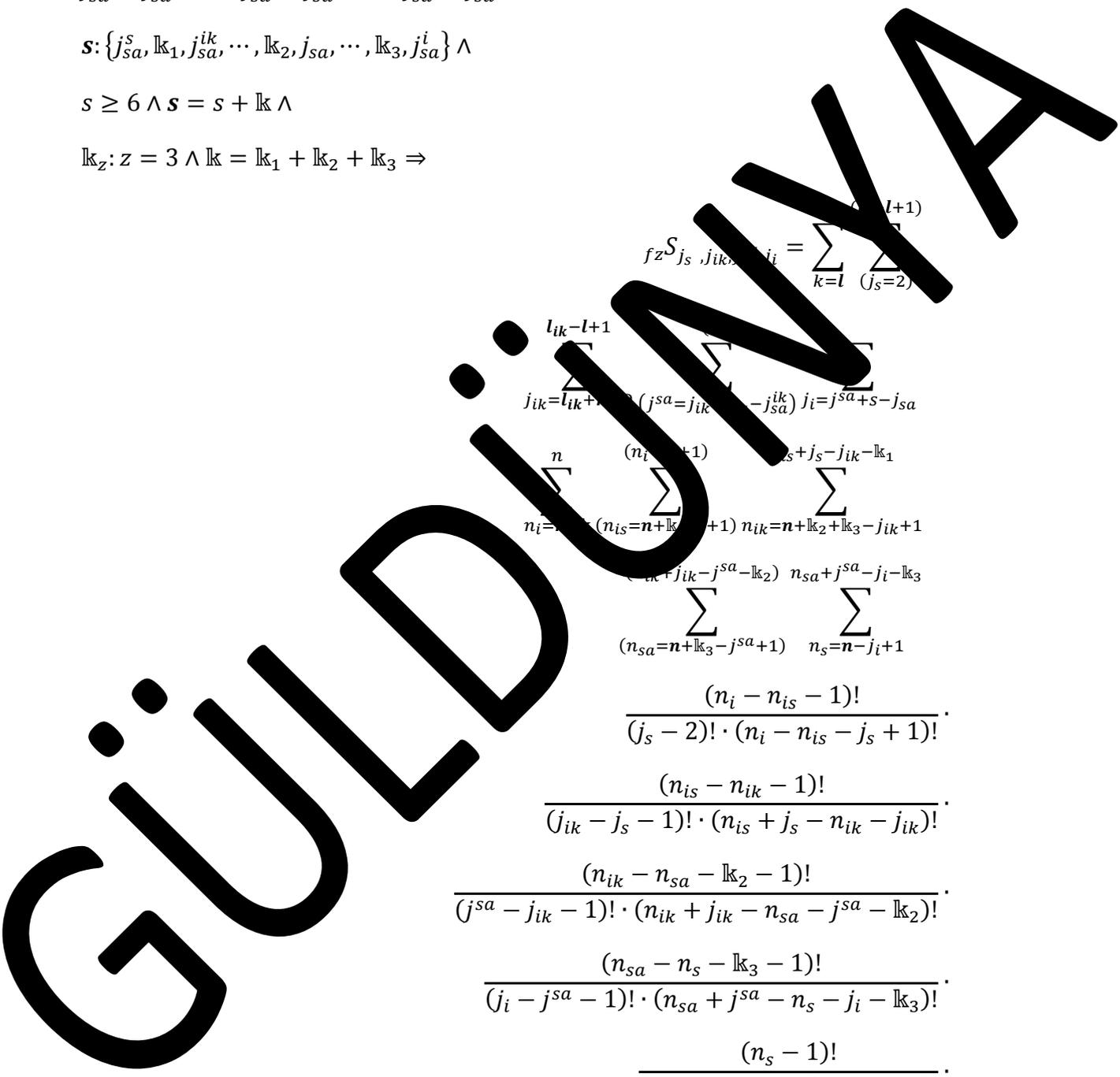
$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$fz S_{j_s, j_{ik}, j_i} = \sum_{k=l}^{l+1} \sum_{(j_s=2)}$$

$$j_{ik} = l_{ik} - l + 1 \quad (j_{sa} = j_{ik} - j_{sa}^{ik}) \quad j_i = j_{sa}^i + s - j_{sa}$$

$$\sum_{n_i=0}^n \sum_{(n_{is}=n+k_1+1)}^{(n_i+1)} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{(n_i+1)} \sum_{n_{sa}=n+k_3-j_{sa}+1}^{(n_i+1)} \sum_{n_s=n-j_i+1}^{(n_i+1)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!} \cdot \frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i - k_3)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$



$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(j_{sa}=j_s+j_{sa}-j_{sa}^{sa})} \sum_{(j_{sa}=j_s+j_{sa}-j_{sa}^{sa})}$$

$$\sum_{n_i=n+k}^n \sum_{(n_i=n+k)}^{(n_i-j_s+1)} \sum_{(n_i=n+k)} \sum_{(j_s-j_{ik}-k_1)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{sa}-k_2)}^{(n_{sa}=n_{ik}+j_{sa}-k_2)} \sum_{(n_{sa}=n_{ik}+j_{sa}-k_2)} \sum_{(n_{sa}=n_{ik}+j_{sa}-k_2)}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - k_2 - k_3 - 2 \cdot j_{sa}^s)!}{(n_i - k_1 - k_2 - k_3)!}$$

$$\frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l \leq D - n + 1 \wedge$$

$$D + l + s - n < l \leq l - 1 \wedge$$

$$1 \leq j_s \leq j_s - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_s + j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=z)}^{(l_s-l+1)}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_i+j_{sa}^{ik}-l-s+1} \sum_{(j_{sa}=j_{ik}+j_{sa})}^{()} \sum_{(j_i=j_s-j_{sa})}^{()}$$

$$\sum_{n_i=n+k}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{is}=n+k_2-j_{ik}+1)}^{n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{ik}=n+j_{sa}-k_2)}^{(n_{ik}=n+j_{sa}-k_2)} \sum_{(j_i=k_3)}^{j_i-k_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(n_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(n_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!}$$

$$\frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i - k_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-l+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{()} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j^{sa}+s-j_{sa}}^{()}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-k_1}^{()}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-1)}^{()} \sum_{(n_s=n_{sa}+j^{sa}-j_i)}^{()}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - k_1 - k_2 - k_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - k_1 - k_2 - k_3)!}$$

$$\frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l = l \wedge l_s \leq D - n - 1 \wedge$$

$$D + l_s + s - l_i + 1 \leq l \leq l - 1$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} - 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + j_{sa} = l_s \wedge l_s - j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} - j_{sa} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)} \sum_{j_i=l_{sa}+n+s-D-j_{ik}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{ik}+j_{ik}-j^{sa})} \sum_{(n_{sa}+j_{sa}-j_i-k_3)} \sum_{(n_{sa}=n+k_3-j_{sa}+1)} \sum_{n_s=n-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - k_2)!}$$

$$\frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_s+s-l}$$

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$$\sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{i_k}=n_{i_s}+j_s-j_{i_k}-l_{k_1}} \sum_{(n_{s_a}=n_{i_k}+j_{i_k}-j^{s_a}-l_{k_2})}^{(\cdot)} \sum_{n_s=n_{s_a}+j^{s_a}-j_i-l_{k_3}} \frac{(n_i + 2 \cdot j_s + j_{s_a} - j^{s_a} - j_i - l_{k_1} - l_{k_2} - l_{k_3} - 2 \cdot j_s)!}{(n_i - n - l_{k_1} - l_{k_2} - l_{k_3})!} \cdot \frac{1}{(n + 2 \cdot j_s + j_{s_a} - j_i - l_{k_1} - l_{k_2} - l_{k_3} - 2 \cdot j_s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!} \cdot \frac{(D - n)!}{(D - j_i - n)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$

$D + l_s + s - n - l_i + 1 \leq l \leq i \wedge l - 1 \wedge$

$1 \leq j_s \leq j_{i_k} - j_{s_a}^{i_k} + 1 \wedge j_s + l_{k_1} = 1 \wedge j_s \leq j_{i_k} + j_{s_a}^{i_k} - l_{k_1} \wedge$

$j_{i_k} + j_{s_a} - j_{s_a}^{i_k} \leq j^{s_a} \leq j_i + l_{k_1} - s \wedge j^{s_a} + l_{k_2} - j_{s_a} \leq j_i \leq n \wedge$

$l_{i_k} - j_{s_a}^{i_k} + 1 > l \wedge l_{s_a} + j_{s_a}^{i_k} - j_{s_a} = l_{i_k} \wedge l_{s_a} + j_{s_a} - s = l_{s_a} \wedge$

$D + j_{s_a} - n < l_{s_a} \leq D + l_s + j_{s_a} - n \wedge$

$D \geq n < n \wedge l_{k_1} > 0 \wedge$

$j_{s_a} \leq j_{i_k} - 1 \wedge j_{s_a}^{i_k} \leq j_{i_k} - 1 \wedge j_{s_a} = j_{s_a}^{i_k} - 1 \wedge$

$s: \{j_{s_a}^s, l_{k_1}^{i_k}, \dots, l_{k_2}, j_s, \dots, l_{k_3}, j_{s_a}^i\} \wedge$

$s \geq 0 \wedge s = s + 1 \wedge$

$l_{k_2}: z = 3 \wedge l_{k_2} = l_{k_1} + l_{k_2} + l_{k_3} \Rightarrow$

$$f^z S_{j_s, j_{i_k}, j^{s_a}, j_i} = \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}^{(l_s-l+1)}$$

$$\sum_{j_{i_k}=j^{s_a}+j_{s_a}^{i_k}-j_{s_a}} \sum_{(j^{s_a}=l_{s_a}+n-D)}^{(l_{s_a}-l+1)} \sum_{j_i=j^{s_a}+s-j_{s_a}}$$

$$\begin{aligned}
 & \sum_{n_i = n + k}^n \sum_{(n_{i_s} = n + k - j_s + 1)}^{(n_i - j_s + 1)} \sum_{(n_{i_k} = n + k_2 + k_3 - j_{i_k} + 1)}^{n_{i_s} + j_s - j_{i_k} - k_1} \\
 & \sum_{(n_{s_a} = n + k_3 - j^{s_a} + 1)}^{(n_{i_k} + j_{i_k} - j^{s_a} - k_2)} \sum_{n_s = n - j_i + 1}^{n_{s_a} + j^{s_a} - j_i - k_3} \\
 & \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \\
 & \frac{(n_{i_s} - n_{i_k} - 1)!}{(j_{i_k} - j_s - 1)! \cdot (n_{i_s} - n_{i_k} - j_{i_k})!} \cdot \\
 & \frac{(n_{i_k} - n_{s_a} - 1)!}{(j^{s_a} - j_{i_k} - 1)! \cdot (n_{i_k} + j_{i_k} - n_{s_a} - j^{s_a} - k_2)!} \cdot \\
 & \frac{(n_{s_a} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{i_k} + j^{s_a} - n_s - k_3)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_i + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{i_k} - l_s - j_{s_a}^{i_k} + 1)!}{(j_s - j_{i_k} - j_{i_k} - l_s)! \cdot (j_{i_k} - j_s - j_{s_a}^{i_k} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot
 \end{aligned}$$

$$\sum_{k=l} \sum_{(j_s = j_{i_k} - j_{s_a}^{i_k} + 1)}^{()}$$

$$\sum_{j_{i_k} = j^{s_a} + j_{s_a}^{i_k} - j_{s_a}}^{(l_s + j_{s_a} - l)} \sum_{(j^{s_a} = l_{s_a} + n - D)} \sum_{j_i = j^{s_a} + s - j_{s_a}}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{i_s} = n + k - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{i_k} = n_{i_s} + j_s - j_{i_k} - k_1}$$

$$\sum_{(n_{s_a} = n_{i_k} + j_{i_k} - j^{s_a} - k_2)}^{()} \sum_{n_s = n_{s_a} + j^{s_a} - j_i - k_3}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}$$

$$\frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!}$$

$$\frac{(D - l)!}{(D + j_i - n - l_i)! (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$D + l_s + s - n - l_i + 1 \leq l \leq i \wedge l - 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j_{sa}^{ik} + s - j_{sa} \leq j_i - n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k}$$

$$\mathbb{k}_2 = 3 \wedge \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fz_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_s - l + 1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa}}^{l_{sa}+j_{sa}^{ik}-l-j_{sa}+1} \sum_{(j_s)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2 - 1)!} \cdot \\
 & \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
 & \frac{(n_s + j_i - n - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - l - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - l_s - j_{sa}^{ik} + 1)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + l_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=l}^{()} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{()} \\
 & \sum_{j_s = l_{sa} + n + j_{sa}^{ik} - D - j_{sa}}^{l_s + l - 1} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}^{()} \sum_{j_i = j^{sa} + s - j_{sa}}^{()} \\
 & \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1} \\
 & \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{()} \sum_{n_s = n_{sa} + j^{sa} - j_i - \mathbb{k}_3} \\
 & \frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!} \cdot \\
 & \frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot
 \end{aligned}$$

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$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$D + l_s + s - n - l_i + 1 \leq l \leq i - 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\}$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$\sum_{j_s=2}^{(l_s-l+1)} \sum_{j_{ik}, j^{sa}, j_i} = \sum_{k=l} \sum_{(j_s=2)}^{(l_s-l+1)}$$

$$\sum_{j_{ik} - j_{sa} + j_{sa}^{ik} - j_{sa}}^{(j^{sa} = j_i + j_{sa} - s)} \sum_{j_i = l_{ik} + n + s - D - j_{sa}^{ik}}^{l_{ik} + s - l - j_{sa}^{ik} + 1}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n + k_2 + k_3 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - k_1}$$

$$\sum_{(n_{sa} = n + k_3 - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - k_2)} \sum_{n_s = n - j_i + 1}^{n_{sa} + j^{sa} - j_i - k_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 1)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{j_{ik} = \dots}^{(\cdot)} \sum_{j_{sa} = \dots}^{(\cdot)} \sum_{j_i = \dots}^{(\cdot)} \sum_{j_s = \dots}^{(\cdot)} \frac{(n_i + j_s + j_{sa} - j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!} \cdot \frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$D + l_s + s - n - l_i + 1 \leq l \leq i - 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$\sum_{j_{ik}=j_{sa}^{ik}-j_{sa}}^{\sum_{j_{ik}=j_{sa}^{ik}-j_{sa}}^{(l_{ik}+j_{sa}-j_{sa}^{ik}+1)}}$$

$$\sum_{j_i=j_{sa}^{sa}-j_{sa}}^{\sum_{j_i=j_{sa}^{sa}-j_{sa}}^{(j_{sa}-D-j_{sa}^{sa})}}$$

$$\sum_{j_s=2}^{\sum_{j_s=2}^{(l_s-l)}}$$

$$\sum_{n+k}^{\sum_{n+k}^{(n_i-j_s)}}$$

$$\sum_{n_{is}=n+k-j_s+1}^{\sum_{n_{is}=n+k-j_s+1}^{(n_{is}+j_s-j_{ik}-k_1)}}$$

$$\sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{\sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{(n_{ik}+j_{ik}-j_{sa}-k_2)}}$$

$$\sum_{n_{sa}=n+k_3-j_{sa}+1}^{\sum_{n_{sa}=n+k_3-j_{sa}+1}^{(n_{sa}+j_{sa}-j_i-k_3)}}$$

$$\sum_{n_s=n-j_i+1}^{\sum_{n_s=n-j_i+1}^{(n_i-n_{is}-1)!}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l}^{(\)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(l_s+j_{sa}-l)} \sum_{(j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{sa})} \sum_{(j_{sa}^{sa}=j_{sa})}$$

$$\sum_{n_i=n+k}^n \sum_{(n_i+k-1)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n_i-k)} \sum_{(j_s-j_{ik}-k_1)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{sa}-k_2)}^{(\)} \sum_{(n_{sa}+j_{sa}-j_i-k_3)}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - k_2 - k_3 - 2 \cdot j_{sa}^s)!}{(n_i - k_1 - k_2 - k_3)!}$$

$$\frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l \leq D - n + 1 \wedge$$

$$D + l + s - n < l \leq i - 1 \wedge$$

$$1 \leq j_s \leq j_{sa} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{sa} + j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1 \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$f_z^S j_s, j_{ik}, j_{sa}, j_i = \sum_{k=l}^{(l_s-l+1)} \sum_{j_s=2}^{(l_s-l+1)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-l+1} \sum_{(j_{sa}=j_{ik}+j_{sa}^{ik})} \sum_{j_i=j_s-j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{is}+j_s-j_{ik}}^{n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{ik}-j_{sa}-k_2)}^{(n_{ik}-j_{sa}-k_2)} \sum_{(n_s=n-j_i+1)}^{(n_s=n-j_i+1)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(n_{sa} - k_1 - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!}$$

$$\frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i - k_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

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$$\sum_{k=l}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_s+j_{sa}^{ik}-l} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j_{sa}+s-}^{()}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{ik}-l_{k_1}}^{()}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-l_{k_2})}^{()} \sum_{(n_{sa}+j_{sa}-j_i)}^{()}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j_{sa}^{ik} - l_{k_2} - \dots - 2 \cdot j_{sa}^s)!}{(n_i - l_{k_1} - l_{k_2} - \dots - l_{k_3})!} \cdot \frac{1}{(n + 2 \cdot j_s + j_{sa} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq 1 \wedge l_i \leq D + s - 1 \wedge$$

$$1 < j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge l_{k_1} + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - 1 \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n - l_{k_1} - l_{k_2} - \dots - l_{k_3} > 0 \wedge$$

$$j_{sa}^{ik} - j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, l_{k_1}, \dots, l_{k_2}, j_{sa}, \dots, l_{k_3}, j_{sa}^i\} \wedge$$

$$s \geq 0 \wedge s = s + l_k \wedge$$

$$l_{k_2}: z = 3 \wedge l_k = l_{k_1} + l_{k_2} + l_{k_3} \Rightarrow$$

$$f_z^S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=l}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\begin{aligned}
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{j_{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j_{sa}=j_{sa}+1)}^{(j_i+j_{sa}-s)} \sum_{j_i=s+1}^{l_{ik}+j_{sa}^{ik}-l-s+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k+l_{k_2}+l_{k_3}-j_i}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n+l_{k_3}-j_{sa}+1)}^{(n_{ik}+j_{ik}-j_{sa}-l_{k_2})} \sum_{n_s=j_i+1}^{n_{sa}+j_{sa}-j_i-1} \\
 & \frac{(n_i-1)!}{(j_s-2)! \cdot (n_i-n_{is}-1)!} \cdot \\
 & \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
 & \frac{(n_{ik}-n_{sa}-l_{k_2}-1)!}{(j_{sa}-j_{ik}-1)! \cdot (n_{ik}+j_s-n_{sa}-j_{sa}-l_{k_2})!} \cdot \\
 & \frac{(n_{sa}-n_s-l_{k_3}-1)!}{(j_i-n_{sa}-1)! \cdot (n_s+j_{sa}-n_s-j_i-l_{k_3})!} \cdot \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \\
 & \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \cdot \\
 & \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(l_{ik}+l_{sa}-j_{sa}-l_{ik})! \cdot (j_{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot \\
 & \frac{(l_i+j_{sa}-l_{sa}-s)!}{(j_{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j_{sa}-s)!} \cdot \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \\
 & \sum_{k=l}^{\binom{()}{}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\binom{()}{}} \\
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}-l+1} \sum_{(j_{sa}=j_{sa}+1)}^{(l_{sa}-l+1)} \sum_{j_i=l_{ik}+j_{sa}^{ik}-l-s+2}^{l_i-l+1}
 \end{aligned}$$

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$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{i_k}=n+l_{k_2}+l_{k_3}-j_{i_k}+1}^{n_{i_s}+j_s-j_{i_k}-l_{k_1}} \\
 & \sum_{(n_{s_a}=n+l_{k_3}-j^{s_a}+1)}^{(n_{i_k}+j_{i_k}-j^{s_a}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{s_a}+j^{s_a}-j_i-l_{k_3}} \\
 & \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \\
 & \frac{(n_{i_s} - n_{i_k} - 1)!}{(j_{i_k} - j_s - 1)! \cdot (n_{i_s} - n_{i_k} - j_{i_k})!} \cdot \\
 & \frac{(n_{i_k} - n_{s_a} - 1)!}{(j^{s_a} - j_{i_k} - 1)! \cdot (n_{i_k} + j_{i_k} - n_{s_a} - j^{s_a} - l_{k_2})!} \cdot \\
 & \frac{(n_{s_a} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{i_k} + j^{s_a} - n_s - l_{k_3})!} \cdot \\
 & \frac{(n_s - 1)!}{(n_i + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{s_a} + j_{s_a}^{i_k} - l_{i_k} - j_{s_a})!}{(j_{i_k} + l_{s_a})! \cdot j^{s_a} - l_{i_k})! \cdot (j^{s_a} + j_{s_a}^{i_k} - j_{i_k} - j_{s_a})!} \cdot \\
 & \frac{(l_i + j_{s_a} - l_{s_a} - s)!}{(j^{s_a} + l_i - j_i - l_{s_a})! \cdot (j_i + j_{s_a} - j^{s_a} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -
 \end{aligned}$$

$$\sum_{k=l} \sum_{(j_s=j_{i_k}-j_{s_a}^{i_k}+1)}^{()}$$

$$\sum_{j_{i_k}=j^{s_a}+j_{s_a}^{i_k}-j_{s_a}} \sum_{(j^{s_a}=j_i+j_{s_a}-s)}^{()} \sum_{j_i=s+1}^{l_{i_k}+j_{s_a}^{i_k}-l-s+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{i_k}=n_{i_s}+j_s-j_{i_k}-l_{k_1}}$$

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$$\frac{\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3} \binom{()}{(n_i+2 \cdot j_s+j_{sa}-j^{sa}-j_i-k_1-k_2-k_3-2 \cdot j_{sa}^s)!} (n_i-n-k_1-k_2-k_3)! \cdot \frac{1}{(n+2 \cdot j_s+j_{sa}-j^{sa}-j_i-2 \cdot j_s^s)!} \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \frac{(D-1)!}{(D+j_s-n-l_i)! \cdot (n-l_i)!}$$

$D \geq n < n \wedge l \neq i \wedge l_i \leq D + s - n \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > j_{sa} \wedge$

$D \geq n < n \wedge l = k > 0 \wedge$

$j_{sa} < j_{sa}^l - 1 \wedge j_{sa}^{ik} < j_{sa} \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^s\} \wedge$

$s \geq 0 \wedge s = s + k_1$

$k_2 \cdot z = 3 \wedge k_1 + k_2 + k_3 \Rightarrow$

$$fz S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=l} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)} \binom{()}{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(j_i+j_{sa}-s)} \sum_{j_i=s+1}^{l_s+s-l}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n+k_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-k_3}$$

$$\begin{aligned}
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2 - 1)!} \cdot \\
& \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3 - 1)!} \cdot \\
& \frac{(n_s + j_i - n - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(n_s - l - 1)!}{(n_s - l - 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} + j^{sa} - l_{ik} - j^{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (l_{sa} + j^{sa} - j_{ik} - j^{sa})!} \cdot \\
& \frac{(l_i + l_{sa} - l_{sa} - s)!}{(j_i + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)} \\
& \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=j_{sa}+1)}^{(l_{sa}-l+1)} \sum_{j_i=l_s+s-l+1}^{l_i-l+1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
\end{aligned}$$

$$\begin{aligned}
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i - 1)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (n_{sa} + j_{sa}^{lk} - j_{sa} - l_{sa})!} \cdot \\
& \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_{sa} - s)! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{k=l}^{(\cdot)} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\cdot)} \\
& \sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}}^{(\cdot)} \sum_{(j^{sa} = j_i + j_{sa} - s)}^{(\cdot)} \sum_{j_i = s+1}^{l_s + s - l} \\
& \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1} \\
& \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\cdot)} \sum_{n_s = n_{sa} + j^{sa} - j_i - \mathbb{k}_3} \\
& \frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!} \cdot \\
& \frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
\end{aligned}$$

$$D \geq n < n \wedge l \neq i \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$\begin{aligned} S_{j_s, j_{ik}, j_{sa}^{ik}} &= \sum_{k=1}^{(j_s)} (j_s = j_{ik} - j_{sa}^{ik} + 1) \\ &\sum_{j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{j_{sa}^{ik}+1}^{j_{sa}^{ik}-l-1} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i-l+1} \\ &\sum_{n_{is}=n+\mathbb{k}-j_s+1}^{n_{is}=n+\mathbb{k}-j_s+1} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\ &\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ &\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\ &\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\ &\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\ &\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \end{aligned}$$

$$\begin{aligned}
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - l_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{l=0}^{l_i - l + 1} \sum_{j_s = j_{ik} - j_{sa}^{l_i}}^{l_i - l + 1} \sum_{j_i = j^{sa} - l - s + 2}^{l_i - l + 1} \sum_{j_{ik} = j_{sa}^{l_i}}^{l_i - l + 1} \sum_{n_{is} = n + k_2 + k_3 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - k_1} \sum_{n_{ik} = n + k_2 + k_3 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - k_1} \sum_{n_{sa} = n + k_3 - j^{sa} - k_2}^{n_{is} + j_s - j_{ik} - k_1} \sum_{n_s = n - j_i + 1}^{n_{sa} + j^{sa} - j_i - k_3} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot
 \end{aligned}$$

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$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+...)}^{(\cdot)} \frac{(l_{ik}+j_{sa}^{ik}-l-s+1)!}{\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\cdot)} \sum_{(j^{sa}=j_{sa}+1)}^{(\cdot)} \sum_{(j_{sa}^{ik}=j_{sa}+1)}^{(\cdot)} \dots} \sum_{n_i=n+k}^n \sum_{(n_i-j_s+1)}^{(\cdot)} \sum_{(n_{ik}=n-k)}^{(\cdot)} \sum_{(j_s-j_{ik}-k_1)}^{(\cdot)} \dots \sum_{(n_{sa}=n_{ik}+...-j^{sa}-k_2)}^{(\cdot)} \sum_{(n_{sa}+j^{sa}-j_i-k_3)}^{(\cdot)} \frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - k_2 - k_3 - 2 \cdot j_{sa}^s)!}{(n_i - k_1 - k_2 - k_3)!} \cdot \frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n \wedge l \neq l_i \wedge l \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^l - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^l\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$fz^S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(l_s+j_{sa}-l)} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\dots}^{n_{is}+j_s-\mathbb{k}-\mathbb{k}_1} \dots$$

$$\dots \frac{(n_i - n_{is})}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \dots$$

$$\dots \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - \dots - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \dots$$

$$\dots \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \dots$$

$$\dots \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \dots$$

$$\dots \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \dots$$

$$\dots \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \dots$$

$$\dots \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)}$$

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$$\begin{aligned}
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=l_s+j_{sa}-l+1)}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i-l+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k+l_2+l_3-j_i}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n+l_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{n_s=j_i+1}^{n_{sa}+j^{sa}-j_i-l_{k_2}} \\
 & \frac{(n_i-1)!}{(j_s-2)! \cdot (n_i-n_{is}-1)!} \cdot \\
 & \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
 & \frac{(n_{ik}-n_{sa}-l_{k_2}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_s-n_{sa}-j^{sa}-l_{k_2})!} \cdot \\
 & \frac{(n_{sa}-n_s-l_{k_3}-1)!}{(j_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-l_{k_3})!} \cdot \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \\
 & \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \cdot \\
 & \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(l_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot \\
 & \frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!} \cdot \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} \cdot \\
 & \sum_{k=l}^{\binom{()}{}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\binom{()}{}} \\
 & \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(l_s+j_{sa}-l)} \sum_{j_i=j^{sa}+s-j_{sa}}
 \end{aligned}$$

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$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{i_s}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{i_k}=n_{i_s}+j_s-j_{i_k}-\mathbb{k}_1}$$

$$\sum_{(n_{s_a}=n_{i_k}+j_{i_k}-j^{s_a}-\mathbb{k}_2)}^{(\)} \sum_{n_s=n_{s_a}+j^{s_a}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + 2 \cdot j_s + j_{s_a} - j^{s_a} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}$$

$$\frac{1}{(n + 2 \cdot j_s + j_{s_a} - j_i - j^{s_a})!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - 1)! \cdot (j_s - 1)!}$$

$$\frac{(D - 1)!}{(D - j_i - n - j_i)!}$$

$D \geq n < n \wedge l \neq i \wedge l_i \leq D + s - n \wedge$

$1 \leq j_s \leq j_{i_k} - j_{s_a}^{i_k} + 1 \wedge j_s + j_{s_a}^{i_k} - 1 \leq j_{i_k} < j^{s_a} + j_{s_a}^{i_k} - 1 \wedge$

$j_{i_k} + j_{s_a} - j_{s_a}^{i_k} \leq j^{s_a} \leq j_i + j_{s_a} - j_{s_a}^{i_k} + s - 1 \leq j_i \leq j_{i_k} \wedge$

$l_{i_k} - j_{s_a}^{i_k} + 1 = l_s \wedge l_{s_a} + j_{s_a} - j_{s_a}^{i_k} > l_{i_k} \wedge l_{i_k} + j_{s_a} - s > l_{s_a} \wedge$

$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

$j_{s_a} < j_{s_a} - 1 \wedge j_{s_a}^{i_k} < j_{s_a} - 1 \wedge j_{s_a}^s = j_{s_a} - 1 \wedge$

$s: (j_{s_a}^s, \mathbb{k}_1, j_{s_a}^{i_k}, \mathbb{k}_2, j_{s_a} - \mathbb{k}_3, j_{s_a}^i)$

$s \geq 1 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$fz^S_{j_s, j_{i_k}, j^{s_a}, j_i} = \sum_{k=l} \sum_{(j_s=j_{i_k}-j_{s_a}^{i_k}+1)}^{(\)}$$

$$\sum_{j_{i_k}=j_{s_a}^{i_k}+1}^{l_{i_k}-l+1} \sum_{(j^{s_a}=j_{i_k}+j_{s_a}-j_{s_a}^{i_k})}^{(l_{s_a}-l+1)} \sum_{j_i=j^{s_a}+s-j_{s_a}}^{l_i-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{i_s}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{i_k}=n+\mathbb{k}_2+\mathbb{k}_3-j_{i_k}+1}^{n_{i_s}+j_s-j_{i_k}-\mathbb{k}_1}$$

$$\begin{aligned}
& \sum_{(n_{sa}=n+l_{k_3}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-l_{k_3}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_s - 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_s - l_{k_2})!} \cdot \\
& \frac{(n_{sa} - n_{ik} - l_{k_3} - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - l_{k_3})!} \cdot \\
& \frac{(n_s - 1)!}{(n - j_i - 1)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - l_{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} - l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{k=l}^{(\quad)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)} \\
& \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}-l+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\quad)} \sum_{j_i=j^{sa}+s-j_{sa}} \\
& \sum_{n_i=n+l_{k_3}}^n \sum_{(n_{is}=n+l_{k_3}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}} \\
& \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{(\quad)} \sum_{n_s=n_{sa}+j^{sa}-j_i-l_{k_3}}
\end{aligned}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}$$

$$\frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!}$$

$$\frac{(D - l)!}{(D + j_i - n - l_i)! (n - j_i)!}$$

$D \geq n < n \wedge l \neq i \wedge l_i \leq D + s - n \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa}^{ik}$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s \leq l_{sa} \wedge$

$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^i - 1 \wedge$

$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3\}$

$s \geq 6 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3$

$$fz^S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-l} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_{sa}-l+1)} \sum_{j_i=j_{sa}+s-j_{sa}}^{l_i-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\begin{aligned}
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - 1)!}{(j_{ik} + l_{sa} - j^{sa} - 1)! \cdot (j^{sa} + j_{sa} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(l_i + j_i - l_{sa} - 1)!}{(j^{sa} + l_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{k=l}^{(\cdot)} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\cdot)} \\
& \sum_{j_{ik} = j_{sa}^{ik} + 1}^{s + j_{sa}^{ik} - l} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}^{(\cdot)} \sum_{j_i = j^{sa} + s - j_{sa}} \\
& \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1} \\
& \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\cdot)} \sum_{n_s = n_{sa} + j^{sa} - j_i - \mathbb{k}_3} \\
& \frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!} \cdot \\
& \frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot
\end{aligned}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$fz S_{j_s, j_{sa}, j_{sa}^{ik}, j_i} = \sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=2)}^{(l_{ik}-l-j_{sa}^{ik}+2)}$$

$$\sum_{j_{ik}+j_{sa}-j_{sa}^{ik}-1}^{(a-l+1)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_i-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{(l_i-l+1)}$$

$$\sum_{n_i=n+k}^{(n_i-j_s+1)} \sum_{(n_{is}=n+k-j_s+1)}^{(n_{is}+j_s-j_{ik}-k_1)}$$

$$\sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{(n_{sa}=n+k_3-j^{sa}+1)}^{(n_{sa}+j^{sa}-j_i-k_3)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j_{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j_{sa} - s)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{k=2}^{(l_{ik} - l - j_{sa}^{ik} + j_{sa})} \sum_{j_s = j_{sa} + s - j_{sa}}^{j_s + j_{sa}^{lk} - 1} \sum_{j_{ik} = j_{sa} + j_{sa} - j_{sa}^{lk}}^{j_{sa} + j_{sa} - j_{sa}^{lk} + j_{sa} - j_{sa}^{lk}} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - k_1}^{(n_i - k_1 - 1)} \sum_{n_{sa} = n_{ik} + j_{ik} - j_{sa} - k_2}^{(n_{is} = n + k - j_s + 1)} \sum_{n_s = n_{sa} + j_{sa} - j_i - k_3}^{(n_i + j_s + j_{sa} - j_{sa} - j_i - k_1 - k_2 - k_3 - 2 \cdot j_{sa}^s)!} \frac{1}{(n_i - n - k_1 - k_2 - k_3)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fz S_{j_s, j_{ik}, j_{sa}^i, j_l} \sum_{k=1}^{l_s-l+1} \sum_{j=2}^{l_i-l+1} \sum_{j_{ik}=j_{sa}^{ik}-1}^{j_{sa}^{ik}} \sum_{j_{sa}=j_{sa}^{ik}+j_{sa}-j_{ik}}^{j_{sa}^{ik}+j_{sa}-j_{ik}-j_{sa}+s-j_{sa}} \sum_{n_i=n+\mathbb{k}}^n \sum_{n_{is}=n+\mathbb{k}_1}^{n_i-j_s+1} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{n_{sa}=n+\mathbb{k}_3-j_{sa}+1}^{n_{ik}+j_{sa}-j_{sa}-\mathbb{k}_2} \sum_{n_s=n-j_i+1}^{n_{sa}+j_{sa}-j_i-\mathbb{k}_3} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l}^{(l_s - l + 1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s + j_{sa}^{ik} - 1}^{(j^{sa} = j_{ik} + j_{sa}^{ik} - j_s)} \sum_{(j_s=2)}$$

$$\sum_{n_i=n+k}^n \sum_{(n_i - j_s + 1)}^{(n_i - j_s + 1)} \sum_{(n_{ik} = j_s - j_{ik} - k_1)}$$

$$\sum_{(n_{sa} = n_{ik} - j^{sa} - k_2)}^{(n_{sa} = n_{ik} - j^{sa} - k_2)} \sum_{(n_{sa} = j^{sa} - j_i - k_3)}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - k_1 - k_2 - k_3 - 2 \cdot j_{sa}^s)!}{(n_i + n - k_1 - k_2 - k_3)!}$$

$$\frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

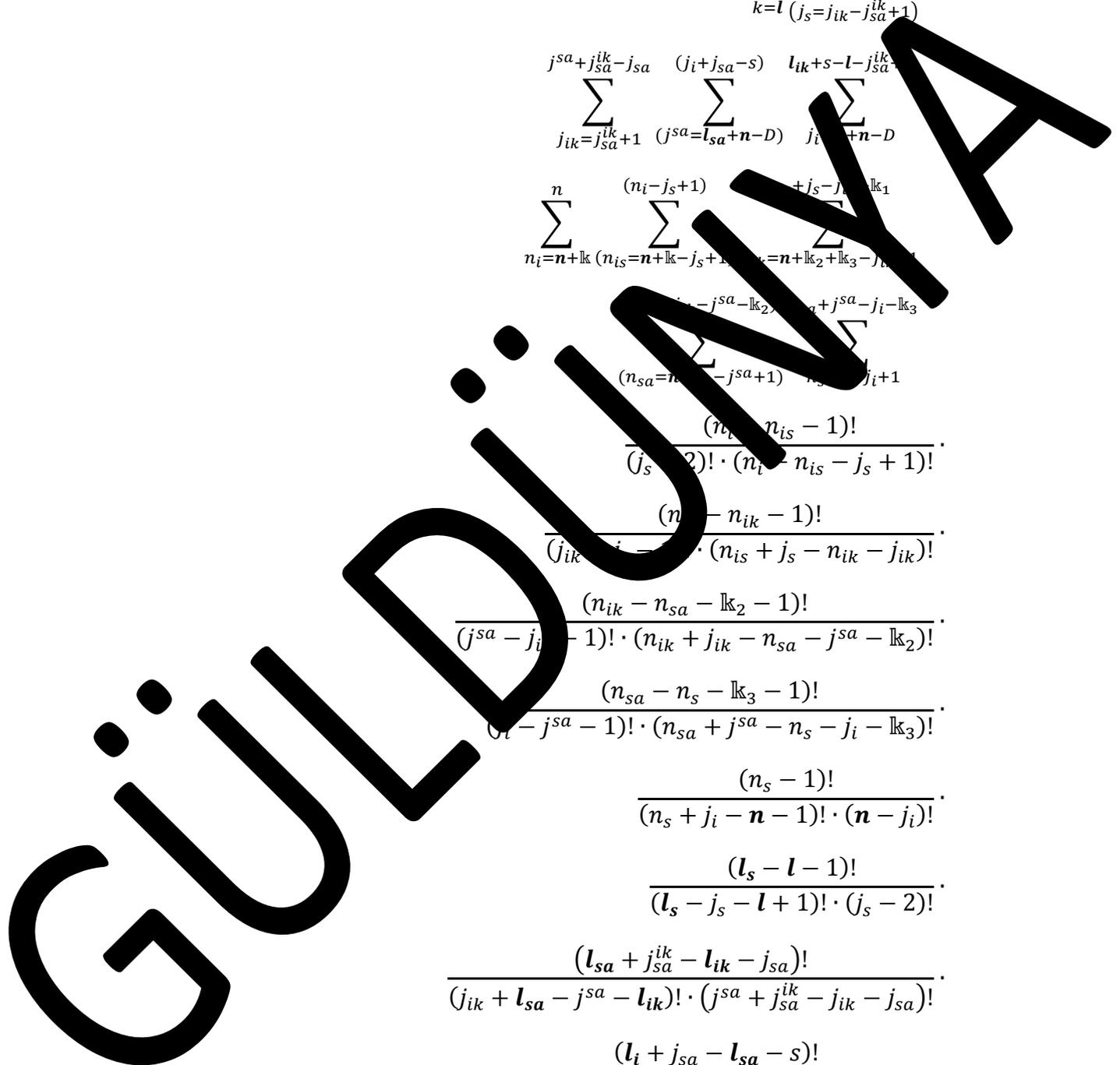
$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$s \geq 6 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$fz^S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()} \sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=l_{sa}+n-D)}^{(j_i+j_{sa}-s)} \sum_{j_i=n-D}^{l_{ik}+s-l-j_{sa}^{ik}} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1)}^{+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n+\mathbb{k}_2-j_{sa}+1)}^{+j_s-j_{ik}-\mathbb{k}_2} \sum_{(n_{is}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1)}^{+j_s-j_{ik}-\mathbb{k}_3} \frac{(n_{is}-n_{is}-1)!}{(j_s-2)! \cdot (n_{is}-n_{is}-j_s+1)!} \cdot \frac{(n_{ik}-n_{ik}-1)!}{(j_{ik}-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_i-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!} \cdot \frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(l-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!} \cdot \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \cdot \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot \frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!} \cdot \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} +$$



$$\begin{aligned}
 & \sum_{k=l}^{(\quad)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)} \\
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}-l+1} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-l+1)} \sum_{j_i=l_{ik}+s-l-j_{sa}^{ik}}^{l_i-l+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \frac{(n_{ik}+j_{ik}-j^{sa})! \cdot (n_{sa}+j^{sa}-j_i-l_{k_3})!}{(n_{sa}=n+l_{k_3}-j^{sa}-1)! \cdot (n_s=n-j_i+l_{k_3}-j^{sa}-1)!} \\
 & \frac{(n_i-n_{ik}-1)!}{(j_s-2)! \cdot (n_{is}+j_s-n_{ik}-j_s+1)!} \\
 & \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \\
 & \frac{(n_{ik}-n_{sa}-l_{k_2}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-l_{k_2})!} \\
 & \frac{(n_{sa}-n_s-l_{k_3}-1)!}{(j_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-l_{k_3})!} \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \\
 & \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \\
 & \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \\
 & \frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!} \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} \\
 & \sum_{k=l}^{(\quad)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)}
 \end{aligned}$$

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$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)} \sum_{j_i=l_i+n-D}^{l_{ik}+s-l-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+lk}^n \sum_{(n_{is}=n+lk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-lk_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-lk_3}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - lk_1 - lk_2 - lk_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - lk_1 - lk_2 - lk_3)!}$$

$$\frac{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}{(n - j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l \neq i \wedge l_s \leq n + 1$
 $1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{ik} - 1 \leq j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$
 $j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - j_{sa}^{ik} \wedge j^{sa} + j_{sa} - j_{sa} \leq j_i \leq n \wedge$
 $l_{ik} - j_{sa} + j_{sa}^{ik} = l_s \wedge l_s + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$
 $D + s - n < l_i \leq D + l_s + j_{sa} - n + 1 \wedge$
 $D \geq n < n \wedge I = lk > lk \wedge$
 $j_{sa} < j_{sa}^i \wedge j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$
 $s: \{j_{sa}^i, j_{sa}^{ik}, \dots, lk_2, j_{sa}, \dots, lk_3, j_{sa}^i\} \wedge$
 $s \geq 6 \wedge s = lk \wedge$
 $lk = lk_1 + lk_2 + lk_3 \Rightarrow$

$$fz^S_{j_s, j_{ik} j^{sa}, j_i} = \sum_{k=l} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\begin{aligned}
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{j_{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j_{sa}=l_{sa}+n-D)}^{(j_i+j_{sa}-s)} \sum_{j_i=l_i+n-D}^{l_s+s-l} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3-j_i}^{n_{is}+j_s-j_{ik}-k_1} \\
 & \sum_{(n_{sa}=n+k_3-j_{sa}+1)}^{(n_{ik}+j_{ik}-j_{sa}-k_2)} \sum_{n_s=j_i+1}^{n_{sa}+j_{sa}-j_i-1} \\
 & \frac{(n_i-1)!}{(j_s-2)! \cdot (n_i-n_{is}-1)!} \cdot \\
 & \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-2)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
 & \frac{(n_{ik}-n_{sa}-k_2-1)!}{(j_{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j_{sa}-k_2)!} \cdot \\
 & \frac{(n_{sa}-n_s-k_3-1)!}{(j_i-n_{sa}-1)! \cdot (n_{sa}+j_{sa}-n_s-j_i-k_3)!} \cdot \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \\
 & \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \cdot \\
 & \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(l_{ik}+l_{sa}-j_{sa}-l_{ik})! \cdot (j_{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot \\
 & \frac{(l_i+j_{sa}-l_{sa}-s)!}{(j_{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j_{sa}-s)!} \cdot \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \\
 & \sum_{k=l}^{\binom{()}{}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\binom{()}{}} \\
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-l} \sum_{(j_{sa}=l_{sa}+n-D)}^{(l_{sa}-l+1)} \sum_{j_i=l_s+s-l+1}^{l_i-l+1}
 \end{aligned}$$

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$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_s+1) \\ (n_{i_s}=n+l_k-j_s+1)}} \sum_{\substack{n_{i_s}+j_s-j_{ik}-l_{k_1} \\ n_{ik}=n+l_{k_2}+l_{k_3}-j_{ik}+1}} \\
 & \sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-l_{k_2}) \\ (n_{sa}=n+l_{k_3}-j^{sa}+1)}} \sum_{\substack{n_{sa}+j^{sa}-j_i-l_{k_3} \\ n_s=n-j_i+1}} \\
 & \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \\
 & \frac{(n_{i_s} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{i_s} - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - l_{k_3})!} \cdot \\
 & \frac{(n_s - 1)!}{(n_i + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa})! \cdot (j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=l}^{\binom{()}{j_s=j_{ik}-j_{sa}^{ik}+1}} \sum_{\binom{()}{j_i=l_i+n-D}} \\
 & \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{\binom{()}{j^{sa}=j_i+j_{sa}-s}} \sum_{\substack{l_s+s-l \\ j_i=l_i+n-D}} \\
 & \sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_s+1) \\ (n_{i_s}=n+l_k-j_s+1)}} \sum_{n_{ik}=n_{i_s}+j_s-j_{ik}-l_{k_1}}
 \end{aligned}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3} (n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - k_1 - k_2 - k_3 - 2 \cdot j_{sa}^s)! / (n_i - n - k_1 - k_2 - k_3)!$$

$$\frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - 1)!}{(D + j_s - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa}^{ik} + j_{sa}^{ik} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^i = j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\}$$

$$s \geq 6 \wedge s = s - k \wedge$$

$$k_z = 3 \wedge k = k_1 + k_2 + k_3$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=l}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j_{sa}+j_{sa}^{ik}-j_{sa} (l_i+n+j_{sa}-D-s-1)} \sum_{(j^{sa}=l_{sa}+n-D)}^{l_i-l+1} \sum_{j_i=l_i+n-D}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1}$$

$$\frac{\sum_{(n_{sa}=n+k_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-k_3} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_s - 1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_s - k_2)!} \cdot \frac{(n_{sa} - n_{sa} - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!} \cdot \frac{(n_s - 1)!}{(n - j_i - 1)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - j_{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} - l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=l}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)}^{(l_{ik}+j_{sa}-l-j_{sa}^{ik}+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i-l+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n+k_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-k_3}$$

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$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2 - 1)!} \cdot \\
 & \frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3 - 1)!} \cdot \\
 & \frac{(n_s + n - n - 1)!}{(n_s + n - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(n - l - 1)!}{(n - l - 1)! \cdot (j_s - l - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j^{sa} - l_{ik} - j^{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (l_{ik})! \cdot (l_{sa} + j^{sa} - j_{ik} - j^{sa})!} \cdot \\
 & \frac{(l_i + l_{sa} - l_{sa} - s)!}{(j_i + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{(\quad)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)} \\
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}-l+1} \sum_{(j^{sa}=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2)}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i-l+1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \\
 & \sum_{(n_{sa}=n+k_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-k_3} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
 \end{aligned}$$

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$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i - 1)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (l_{sa} + j_{sa}^{lk} - j_{sa}^{lk} - j_{sa})!}$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_{sa} - s)! \cdot (j_i + j_{sa} - j^{sa} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$(l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1)$$

$$\sum_{j_{ik}=j_{sa}^{lk}-j_{sa}}^{k-j_{sa}} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)} (j^{sa}=l_i+n+j_{sa}-D-s) \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

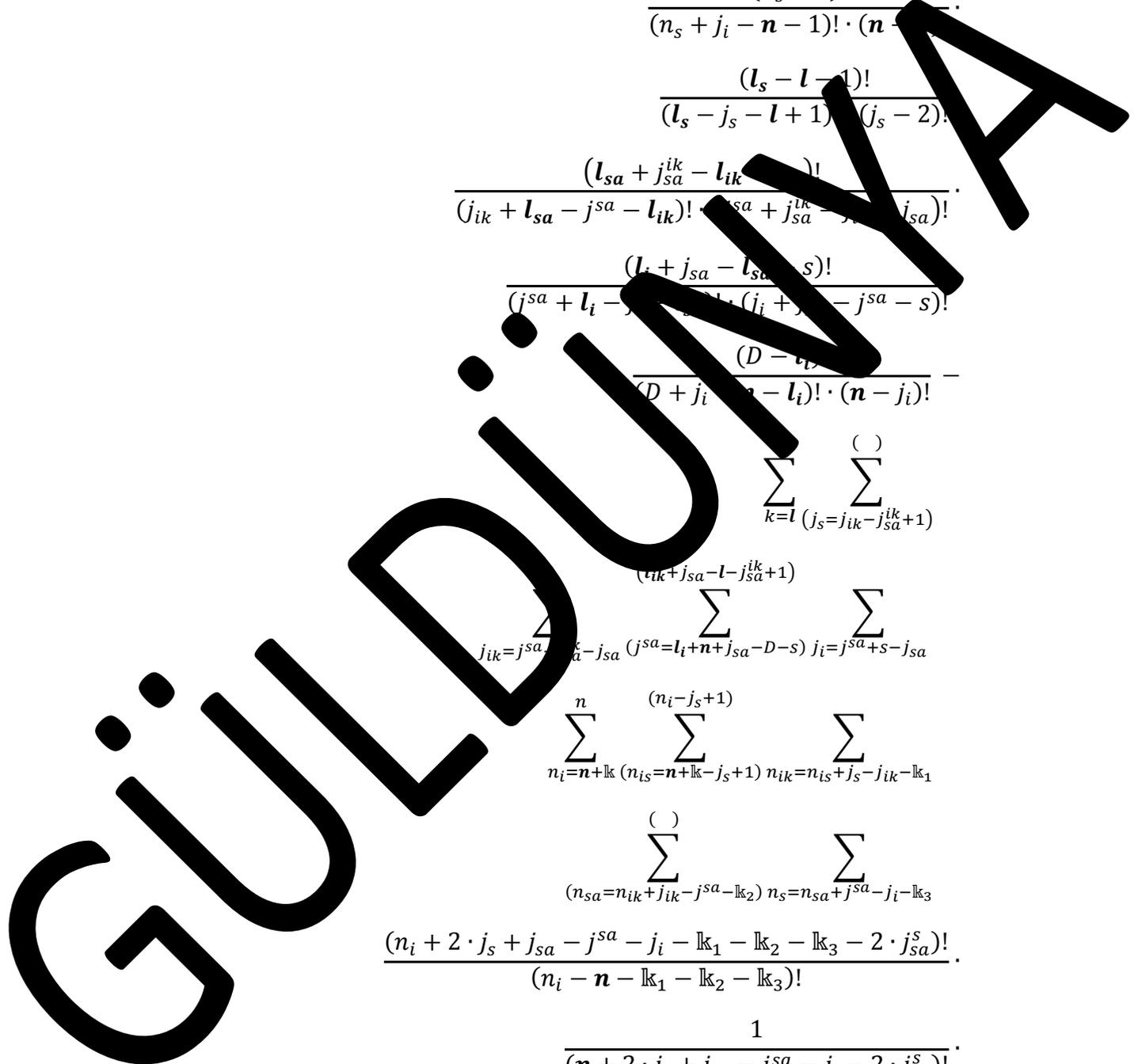
$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}$$

$$\frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$



$$D \geq n < n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$fz \sum_{j_s=j_{ik}-j_{sa}^{ik}+1}^{\dots} \sum_{j_i=l_i+l-1}^{\dots} \sum_{j_{ik}=j_{sa}^{ik}+1}^{\dots} \sum_{j^{sa}=l_{sa}+n-D}^{\dots} \sum_{j_i=l_i+n-D}^{\dots} \sum_{i=n+k}^{\dots} \sum_{n_{is}=n+k-j_s+1}^{\dots} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{\dots} \sum_{n_{sa}=n+k_3-j^{sa}+1}^{\dots} \sum_{n_s=n-j_i+1}^{\dots} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!}$$

$$\begin{aligned}
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j_{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j_{sa} - s)!} \cdot \\
 & \frac{(l_i - 1)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{j_{sa}^{ik} = j_{sa}^{ik} + 1}^{(j_{sa} + j_{sa}^{ik} - j_{sa})} \sum_{(j_{sa} = l_i + j_{sa} - D - s)}^{(l_s + j_{sa} - l)} \sum_{j_i = j_{sa} + s - j_{sa}}^{l_i - l + 1} \sum_{j_{sa} = n + k_3 - j_{sa} + 1}^{(n_i - j_s)} \sum_{n_{ik} = n + k_2 + k_3 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - k_1} \\
 & \sum_{(n_{sa} = n + k_3 - j_{sa} + 1)}^{(n_{ik} + j_{ik} - j_{sa} - k_2)} \sum_{n_s = n - j_i + 1}^{n_{sa} + j_{sa} - j_i - k_3} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i - k_3)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot
 \end{aligned}$$

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$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j_{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j_{sa} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l}^{()} \sum_{j_s=j_{sa}^{ik}+1}^{()}$$

$$\sum_{j_{ik}=j_{sa}^{ik}-l}^{l_s+j_{sa}^{ik}-l} (l_s-j_{sa}^{ik}+1) \sum_{j_i=j_{sa}+s-j_{sa}}^{(l_s-j_{sa}^{ik}+1)}$$

$$\sum_{n_i=n+l_k}^{(n_i-j_{sa}^{ik}+1)} \sum_{n_{is}=n+l_k-j_s+l_{sa}}^{(n_i-j_{sa}^{ik}+1)-l_{k_1}} \sum_{n_{ik}=n+l_{k_2}+l_{k_3}-j_{ik}+1}^{(n_i-j_{sa}^{ik}+1)-l_{k_1}}$$

$$\sum_{(n_{ik}-j_{sa}-l_{k_2})}^{(n_{ik}-j_{sa}-l_{k_2})} \sum_{(n_{sa}=n+l_{k_3}-j_{sa}+1)}^{(n_{sa}=n+l_{k_3}-j_{sa}+1)} \sum_{n_s=n-j_i+1}^{(n_{sa}=n+l_{k_3}-j_{sa}+1)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - l_{k_2})!}$$

$$\frac{(n_{sa} - n_s - l_{k_3} - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i - l_{k_3})!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j_{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j_{sa} - s)!}$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_i+n+j_{sa}^{ik}-D-s-1} \sum_{(j^{sa}=l_{sa}-l+1)}^{(l_{sa}-l+1)} \sum_{j_i=l_i+n-l}^{l_i-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_1}^{n_{is}+j_s-\mathbb{k}-\mathbb{k}_1} \sum_{(j_{ik}=n_{ik}+j_s-\mathbb{k}_1)}^{(n_{ik}+j_s-\mathbb{k}_1)}$$

$$\sum_{(j_{sa}^{ik}=n_{sa}+j^{sa}-j_{ik}-j_i)}^{(n_{sa}+j^{sa}-j_{ik}-j_i)} \sum_{(j_i=n_{sa}+j^{sa}-j_{ik}-j_i)}^{(n_{sa}+j^{sa}-j_{ik}-j_i)}$$

$$\frac{(n_i - n_{is})}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(j^{sa} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}{(j_i - 1)! \cdot (n_{sa} - n_s - \mathbb{k}_3 - 1)!}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)}$$

$$\begin{aligned}
 & \sum_{j_{ik} = l_i + n + j_{sa}^{lk} - D - s}^{l_{ik} - l + 1} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{lk})}^{(l_{sa} - l + 1)} \sum_{j_i = j^{sa} + s - j_{sa}}^{l_i - l + 1} \\
 & \sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n + k_2 + k_3 - j_i}^{n_{is} + j_s - j_{ik} - k_1} \\
 & \sum_{(n_{sa} = n + k_3 - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - k_2)} \sum_{n_s = j_i + 1}^{n_{sa} + j^{sa} - j_i} \\
 & \frac{(n_i - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} + 1)!} \cdot \frac{(n_{is} - n_{ik} + 1)!}{(j_{ik} - j_s + 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_s - n_{sa} - j^{sa} - k_2)!} \\
 & \frac{(n_{sa} - n_s - k_3 + 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{is} + j^{sa} - n_s - j_i - k_3)!} \\
 & \frac{(n_s - 1)!}{(l_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \\
 & \frac{(l_{sa} + j_{sa}^{lk} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{lk} - j_{ik} - j_{sa})!} \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \\
 & \sum_{k=l}^{\binom{()}{}} \sum_{(j_s = j_{ik} - j_{sa}^{lk} + 1)}^{\binom{()}{}}
 \end{aligned}$$

$$\sum_{j_{ik} = l_i + n + j_{sa}^{lk} - D - s}^{l_{ik} - l + 1} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{lk})}^{\binom{()}{}} \sum_{j_i = j^{sa} + s - j_{sa}}^{\binom{()}{}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{i_s}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{i_s}+j_s-j_{ik}-k_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3} (n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - k_1 - k_2 - k_3 - 2 \cdot j_s)! \cdot \frac{1}{(n_i - n - k_1 - k_2 - k_3)!} \cdot \frac{1}{(n + 2 \cdot j_s + j_{sa} - j_i - j^{sa})!} \cdot \frac{(l_i - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!} \cdot \frac{(D - n)!}{(D - j_i - n - j_i)!}$$

$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$
 $1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} < j^{sa} + j_{sa}^{ik} - j_i \wedge$
 $j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa}^{ik} + j_s - j_{sa}^{ik} \leq j_i \leq j_{ik} \wedge$
 $l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa} - j_{sa} > l_{ik} \wedge l_{sa} + j_{sa} - s > l_{sa} \wedge$
 $D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$
 $D \geq n < n \wedge l = k_1 = 0 \wedge$
 $j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$
 $s: \{j_{sa}^i - k_1, j_{sa}^{ik}, \dots, k_2, \dots, k_3, j_{sa}\} \wedge$
 $s \geq 6 \wedge s = s + k \wedge$
 $k_z: z = 3 \wedge k = k_2 + k_3 \Rightarrow$

$$f_z^S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_i+n+j_{sa}^{ik}-D-s-1} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-l+1)} \sum_{j_i=l_i+n-D}^{l_i-l+1}$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{i_k}=n+l_k+l_{k_2}+l_{k_3}-j_{i_k}+1}^{n_{i_s}+j_s-j_{i_k}-l_{k_1}} \\
 & \sum_{(n_{s_a}=n+l_{k_3}-j^{s_a}+1)}^{(n_{i_k}+j_{i_k}-j^{s_a}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{s_a}+j^{s_a}-j_i-l_{k_3}} \\
 & \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \\
 & \frac{(n_{i_s} - n_{i_k} - 1)!}{(j_{i_k} - j_s - 1)! \cdot (n_{i_s} - n_{i_k} - j_{i_k})!} \cdot \\
 & \frac{(n_{i_k} - n_{s_a} - 1)!}{(j^{s_a} - j_{i_k} - 1)! \cdot (n_{i_k} + j_{i_k} - n_{s_a} - j^{s_a} - l_{k_2})!} \cdot \\
 & \frac{(n_{s_a} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{i_k} + j^{s_a} - n_s - l_{k_3})!} \cdot \\
 & \frac{(n_s - 1)!}{(n_i + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{s_a} + j_{s_a}^{i_k} - l_{i_k} - j_{s_a})!}{(j_{i_k} + l_{s_a})! \cdot (j^{s_a} - l_{i_k})! \cdot (j^{s_a} + j_{s_a}^{i_k} - j_{i_k} - j_{s_a})!} \cdot \\
 & \frac{(l_i + j_{s_a} - l_{s_a} - s)!}{(j^{s_a} + l_i - j_i - l_{s_a})! \cdot (j_i + j_{s_a} - j^{s_a} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +
 \end{aligned}$$

$$\sum_{k=l}^{\binom{()}{}} \sum_{(j_s=j_{i_k}-j_{s_a}^{i_k}+1)}^{\binom{()}{}}$$

$$\sum_{j_{i_k}=l_i+n+j_{s_a}^{i_k}-D-s}^{l_s+j_{s_a}^{i_k}-l} \sum_{(j^{s_a}=j_{i_k}+j_{s_a}-j_{s_a}^{i_k})}^{(l_{s_a}-l+1)} \sum_{j_i=j^{s_a}+s-j_{s_a}}^{l_i-l+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{i_k}=n+l_k+l_{k_2}+l_{k_3}-j_{i_k}+1}^{n_{i_s}+j_s-j_{i_k}-l_{k_1}}$$

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$$\begin{aligned}
 & \sum_{(n_{sa}=n+l_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-l_3} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_s - 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_s - l_2)!} \cdot \\
 & \frac{(n_{sa} - n_{is} - l_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - l_3)!} \cdot \\
 & \frac{(n_s - 1)!}{(n - j_i - 1)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - l_{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} - l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=l}^{(\quad)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)} \\
 & \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\quad)} \sum_{j_i=j^{sa}+s-j_{sa}} \\
 & \sum_{n_i=n+l_3}^n \sum_{(n_{is}=n+l_3-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_1} \\
 & \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_2)}^{(\quad)} \sum_{n_s=n_{sa}+j^{sa}-j_i-l_3}^{(\quad)}
 \end{aligned}$$

GÜLDÜZMÜŞA

$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!} \cdot \frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!} \cdot \frac{(D - l)!}{(D + j_i - n - l_i)! (n - j_i)!}$$

$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa}^{sa}$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$

$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$

$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

$j_{sa} < j_{sa}^l - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{sa} < j_{sa}^{ik} - 1$

$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^l\} \wedge$

$s \geq 6 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z \in \{1, 2, 3\} \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$fz_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_i+n-D-s)} \sum_{(j_s=2)} \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(l_{sa}-l+1)} \sum_{(j^{sa}=l_{sa}+n-D)} \sum_{j_i=l_i+n-D}^{l_i-l+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\begin{aligned}
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l - 1)!}{(l_s - l + 1)! \cdot (l - 2)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - 1)!}{(j_{ik} + l_{sa} - j^{sa} - 1)! \cdot (j^{sa} + j_{sa} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(l_i + j_i - l_{sa} - 1)!}{(j^{sa} + l_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
& \frac{(D + l_i)!}{(D + l_i - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=l}^{(l_{ik} - l - j_{sa}^{ik} + 2)} \sum_{(j_s = l_i + n - D - s + 1)} \\
& \sum_{j_{ik} = j_s + j_{sa}^{lk} - 1}^{(l_{sa} - l + 1)} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})} \sum_{j_i = j^{sa} + s - j_{sa}}^{l_i - l + 1} \\
& \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \\
& \sum_{(n_{sa} = n + \mathbb{k}_3 - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = n - j_i + 1}^{n_{sa} + j^{sa} - j_i - \mathbb{k}_3} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
\end{aligned}$$

$$\begin{aligned}
 & \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa})!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - l_{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=0}^{(i)} \sum_{i_s=l_i+n-D-s+1}^{(i)+2} \sum_{j_i=j^{sa}+s-j_{sa}}^{(i)} \sum_{j_i=n+\mathbb{k}}^{(i)} \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(n_i-j_s+1)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(i)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}^{(i)} \\
 & \frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!} \cdot \\
 & \frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

$D \geq n < n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_z^S j_s, j_{sa}, j_{sa}^{ik}, j_i = \sum_{k=l}^{(l_i+n-D-s)} \sum_{(j_s=2)}^{(l_i+n-D-s)}$$

$$\sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(l_{sa}-1)} \sum_{(j_{sa}=l_{sa}+n-D)}^{(l_i-l+1)} \sum_{(j_i=l_i+n-D)}^{(l_i-l+1)}$$

$$\sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{n} \sum_{(n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1)}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j_{sa}+1)}^{(n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)} \sum_{(n_s=n-j_i+1)}^{n_{sa}+j_{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\begin{aligned}
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - l_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{j_s=l_i+n-D-s}^{l_s-l} \frac{(l_s-l)!}{(j_s+l_i+n-D-s)!} \cdot \\
 & \sum_{j_{ik}=j_s+l_i-l-1}^{l_i-l+1} \frac{(l_i-l+1)!}{(j_{ik}+j_s+l_i-l-1)!} \cdot \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{l_i-l+1} \frac{(l_i-l+1)!}{(j_{sa}+j_{ik}+j_{sa}-j_{sa}^{ik})!} \cdot \\
 & \sum_{n_{ik}=n+l_{k_2}+l_{k_3}-j_{ik}+1}^n \frac{(n_{ik}+j_{sa}-j_{sa}^{ik})!}{(n_{sa}+n+l_{k_3}-j^{sa}+1)!} \cdot \sum_{n_{is}=n+l_{k_1}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \frac{(n_{is}+j_s-j_{ik}-l_{k_1})!}{(n_{is}=n+l_{k_1}+1)!} \cdot \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - n_s - l_{k_3} - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - l_{k_3})!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot
 \end{aligned}$$

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$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_i+n-D-s+...}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{()} \sum_{(j^{sa}=j_{ik}+j_{sa}^{sa}-j_i-j_{sa})}^{()}$$

$$\sum_{n_i=n+k}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{ik}+j_s-j_{ik}-k_1)}$$

$$\sum_{(n_{sa}=n_{ik}+j_s-j_{sa}-k_2)}^{()} \sum_{(n_{sa}+j^{sa}-j_i-k_3)}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - k_1 - k_2 - k_3 - 2 \cdot j_{sa}^s)!}{(n_i + n - k_1 - k_2 - k_3)!}$$

$$\frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n \wedge n \wedge l \neq i \wedge l \leq D - n + 1 \wedge$$

$$D + l_s + s - n - 1 = l_i + s \leq l \leq i - 1 \wedge$$

$$1 - j_s \leq j_{sa} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$\begin{aligned}
 & \sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)} \\
 & \sum_{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}^{(\cdot)} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\cdot)} \sum_{j_i=l_i+n-l-j_{sa}^{ik}+1}^{(\cdot)} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{ik}-k_1}^{(n_{is}-j_s+1)} \\
 & \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-k_2)}^{(\cdot)} \sum_{(n_{sa}+j_{sa}-j_i)}^{(\cdot)} \\
 & \frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - k_2 - \dots - 2 \cdot j_{sa}^s)!}{(n_i - k_1 - k_2 - \dots - k_3)!} \cdot \\
 & \frac{1}{(n + 2 \cdot j_s + j_{sa} - j_i - 2 \cdot j_{sa}^s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

$$D \geq n < n \wedge l \neq 1 \wedge l_s \leq D - n - 1 \wedge$$

$$D + l_s + s - \dots - l_i + \dots < l \leq l_i - 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} - 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 \leq l_s \wedge l_{ik} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D - l_s - \dots \leq l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} - j_{sa} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$\begin{aligned}
 f_z S_{j_s, j_{ik}, j^{sa}, j_i} &= \sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)} \\
 &\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-l+1)} \sum_{j_i=l_i+n}^{l_i-l+1} \\
 &\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{n_{is}+j_s-j_{ik}-k_1} \\
 &\sum_{(n_{ik}+j_{ik}-j^{sa}+j_i-k_3)}^{(n_{ik}+j_{ik}-j^{sa}+j_i-k_3)} \sum_{(n_{sa}=n+k_3-j^{sa}+1)}^{(n_{sa}=n+k_3-j^{sa}+1)} \sum_{n_s=n-j_i+k_3}^{n_s=n-j_i+k_3} \\
 &\frac{(n_s - n_{is} - 1)!}{(j_s - 2)! \cdot (n_{is} - j_s + 1)!} \cdot \\
 &\frac{(n_{is} - j_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - j_s - n_{ik} - j_{ik})!} \cdot \\
 &\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{ik} - j_{sa} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
 &\frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!} \cdot \\
 &\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 &\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 &\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 &\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 &\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 &\sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)}
 \end{aligned}$$

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$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)} \sum_{l_s+s-l}^{(j_i+l_i+n-D)}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{(n_s=n_{sa}+j^{sa}-j_i-l_{k_3})}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - l_{k_1} - l_{k_2} - l_{k_3} - \dots \cdot j_{sa}^s)!}{(n_i - n - l_{k_1} - l_{k_2} - l_{k_3} - \dots)!}$$

$$\frac{(n + \dots - j^{sa} - j_i - 2 \cdot j_{sa}^s)!}{(l_s - \dots - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - \dots)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq \dots = n + 1$$

$$D + l_s + s - n - l_i + 1 \leq \dots \wedge l - 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} + j_{sa} - s \wedge j^{sa} - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_{sa} + j_{sa} - j_{sa}^{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + j_{sa} - n < l_i \leq D + j_{sa} + s - n - 1 \wedge$$

$$D \geq n < n - l = l_k > \dots$$

$$j_{sa}^{ik} - 1 \wedge j_{sa} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, l_{k_1}, \dots, l_{k_2}, j_{sa}, \dots, l_{k_3}, j_{sa}^i\} \wedge$$

$$j_{sa}^s = s + l_k \wedge$$

$$l_{k_z}: z = 3 \wedge l_k = l_{k_1} + l_{k_2} + l_{k_3} \Rightarrow$$

$$f_z^S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l} \sum_{(j_s=2)}^{(l_{ik}-l-j_{sa}^{ik}+2)}$$

$$\begin{aligned}
 & \sum_{j_{ik}=j_s+j_{sa}^{lk}-1} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-l+1)} \sum_{j_i=l_i+n-D}^{l_i-l+1} \\
 & \sum_{n_i=n+lk}^n \sum_{(n_{is}=n+lk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+lk_2+lk_3-j_{i-1}}^{n_{is}+j_s-j_{ik}-lk_1} \\
 & \sum_{(n_{sa}=n+lk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-lk_2)} \sum_{n_s=j_i+1}^{n_{sa}+j^{sa}-j_{i-1}} \\
 & \frac{(n_i-1)!}{(j_s-2)!(n_i-n_{is}+1)!} \cdot \\
 & \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s)(n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
 & \frac{(n_{ik}-n_s-lk_2-1)!}{(j^{sa}-j_{ik}-1)!(n_{ik}+j_s-n_{sa}-j^{sa}-lk_2)!} \cdot \\
 & \frac{(n_{sa}-n_s-lk_3-1)!}{(j_i-n_{sa}-1)!(n_{sa}+j^{sa}-n_s-j_i-lk_3)!} \cdot \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)!(n-j_i)!} \cdot \\
 & \frac{(l_s-l-1)!}{(l_s-j_s-l+1)!(j_s-2)!} \cdot \\
 & \frac{(l_{sa}+j_{sa}^{lk}-l_{ik}-j_{sa})!}{(l_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{lk}-j_{ik}-j_{sa})!} \cdot \\
 & \frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!} \cdot \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)!(n-j_i)!} \cdot \\
 & \sum_{k=l}^{(l_{ik}-l-j_{sa}^{lk}+2)} \sum_{(j_s=l_i+n-D-s+1)} \\
 & \sum_{j_{ik}=j_s+j_{sa}^{lk}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{lk})}^{()} \sum_{j_i=j^{sa}+s-j_{sa}}
 \end{aligned}$$

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$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3} \frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - k_1 - k_2 - k_3 - 2 \cdot j_s)!}{(n_i - n - k_1 - k_2 - k_3)!} \cdot \frac{1}{(n + 2 \cdot j_s + j_{sa} - j_i - j_s \cdot j^{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!} \cdot \frac{(D - l)!}{(D - j_i - n - l + 1)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} < j^{sa} + j_{sa}^{ik} - j_i \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa}^{ik} - j_s + j^{sa} + s - 1 \leq j_i \leq j_{ik} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa} - j_{sa} = l_{ik} \wedge j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$s: (j_{sa}^s, k_1, j_{sa}^{ik}, k_2, j_{sa}, k_3, j_{sa}^i)$$

$$s \geq 1 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(j_i+j_{sa}-s)} \sum_{(j^{sa}=j_{sa}+1)}^{l_s+s-l} \sum_{j_i=s+1}^{l_s+s-l}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1}$$

$$\begin{aligned}
 & \sum_{(n_{sa}=n+k_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-k_3} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_s)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_s - k_2)!} \cdot \\
 & \frac{(n_{sa} - n_{sa} - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!} \cdot \\
 & \frac{(n_s - 1)!}{(n - j_i - 1)!} \cdot (n - j_i)! \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - j_{sa}^{ik} + 1)!}{(j_s + j_{ik} - l_{ik} - 1)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} - l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}^{l_s-l+1} \\
 & \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(l_{sa}-l+1)} \sum_{(j^{sa}=j_{sa}+1)}^{l_i-l+1} \sum_{j_i=l_s+s-l+1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \\
 & \sum_{(n_{sa}=n+k_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-k_3}
 \end{aligned}$$

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$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2 - 1)!} \cdot \\
 & \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3 - 1)!} \cdot \\
 & \frac{(n_s + j_i - n - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(n - l - 1)!}{(n - l - 1)! \cdot (j_s - l - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - l_s - j_{sa}^{ik} - 1)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_i - l_{sa} - l_s)!}{(j_s + l_i - j_i - l_s - 1)! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=l}^{(\quad)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)} \\
 & \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\quad)} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\quad)} \sum_{j_i=s+1}^{l_s+s-l} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \\
 & \frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!} \cdot \\
 & \frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!}
 \end{aligned}$$

GÜLDÜZMAYA

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$\sum_{k=l}^s \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(l_s+j_{sa}-l)} \sum_{(j^{sa}=j_{sa}+1)}^{l_i-l+1} \sum_{j_i=j^{sa}+s-j_{sa}}^{n_i-j_s+1} \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_{sa}=n+k_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-k_3} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!}$$

$$\begin{aligned}
& \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(l_i + j_{sa} - l_{sa} - 1)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - l_{sa} - s)!} \cdot \\
& \frac{(l_i - l_i)!}{(n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{k=l}^{-l+1} \sum_{(j_s=2)}^{-l+1} \\
& \sum_{j_i=j^{sa}+j_{sa}^{a-l+1}}^{-l+1} \sum_{(l_s+j_{sa}-l+1)}^{-l+1} \sum_{j_i=j^{sa}+s-j_{sa}}^{-l+1} \\
& \sum_{n+l_{ik}}^{(n_i-j_s+1)} \sum_{(n_{is}=n+l_{ik}-j_s+1)}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \sum_{(n_{sa}=n+l_{ik_3}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{(n_s=n-j_i+1)}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot
\end{aligned}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{j_s = j_{ik} - j_{sa}^{ik}}$$

$$\sum_{j_{ik} = j_s + j_{sa}^{ik} - j_{sa}^{ik}} \sum_{j_i = j_s + j_{sa}^{ik} - j_{sa}^{ik} + s - j_{sa}^{ik}}$$

$$\sum_{n + k_1}^n \sum_{n_{is} = n + j_s + 1}^{j_s + 1} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - k_1}$$

$$\sum_{n_{sa} = n_{ik} + j_{ik} - j^{sa} - k_2} \sum_{n_s = n_{sa} + j^{sa} - j_i - k_3}$$

$$\frac{(n_i + j_i + j_s - j^{sa} - j_i - k_1 - k_2 - k_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - k_1 - k_2 - k_3)!}$$

$$\frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=l}^{(j_{ik}-j_{sa}^{ik})} \sum_{(j_s=2)}^{(j_s-2)} \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-l} \sum_{(j_{sa}=j_{ik}+1)}^{(j_{sa}=j_{ik}+1)} \sum_{j_i=j_{sa}+s}^{l_i+1} \sum_{n_i=n_{ik}}^{(n_{is}=n_{ik}+1)} \sum_{(n_{is}=n_{ik}+1)}^{(n_{is}=n_{ik}+1)} \sum_{n_{ik}=n_{sa}+j_{ik}-j_{sa}}^{(n_{ik}=n_{sa}+j_{ik}-j_{sa})} \sum_{(n_{sa}=n_{s}-j_{sa}+1)}^{(n_{sa}=n_{s}-j_{sa}+1)} \sum_{n_s=n-j_i+1}^{(n_s=n-j_i+1)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j_{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j_{sa} - s)!}$$

$$\begin{aligned}
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{(l_s - l + 1)} \sum_{(j_s=2)} \\
 & \sum_{j_{ik}=l_s + j_{sa}^{ik} - l + 1}^{l_{ik} - l + 1} \sum_{(j_{sa}=j_{ik} + j_{sa} - j_{sa}^{ik})} \sum_{(j_{sa} + s - j_{sa})}^{l_i - l + 1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_{sa})}^{(n_i - j_s + 1)} \sum_{(n_{ik}=n+k_2)}^{n_{is} + j_s - k_1} \\
 & \frac{(n_{ik} + j_{ik} - j_{sa})! \cdot (n_{sa} + j_{sa} - j_i - k_1)!}{(n_{sa} + k_3 - j_{sa})! \cdot (n_{is} - j_i + 1)!} \\
 & \frac{(n_{is} - 1)!}{(j_s - 2)! \cdot (n_{is} - j_s + 1)!} \\
 & \frac{(n_{ik} - 1)!}{(j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{sa} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!} \\
 & \frac{(n_{sa} - n_s - k_3 - 1)!}{(j_{sa} - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i - k_3)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j_{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j_{sa} - s)!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -
 \end{aligned}$$

GÜLDEN

$$\sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\cdot)} \sum_{j_i=j^{sa}+s-}^{(\cdot)}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{ik}-l_{k_1}}^{(\cdot)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{(\cdot)} \sum_{(n_{sa}+j^{sa}-j_i)}^{(\cdot)}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - l_{k_2} - \dots - 2 \cdot j_{sa}^s)!}{(n_i - l_{k_1} - l_{k_2} - \dots - l_{k_3})!}$$

$$\frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq 1 \wedge l_i \leq D + s - 1 \wedge$$

$$1 < j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_{sa}^{ik} + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa}^{ik} - j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n - l_{k_1} - l_{k_2} - l_{k_3} > \wedge$$

$$j_{sa}^{ik} - j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, l_{k_1}, \dots, l_{k_2}, j_{sa}, \dots, l_{k_3}, j_{sa}^i\} \wedge$$

$$s \geq 0 \wedge s = s + l_{k_1} \wedge$$

$$l_{k_2}: z = 3 \wedge l_{k_2} = l_{k_1} + l_{k_2} + l_{k_3} \Rightarrow$$

$$f^z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}^{(\cdot)}$$

$$\begin{aligned}
 & \sum_{j_{ik}=j_s+j_{sa}^{lk}-1}^{l_{ik}-l+1} \binom{(\quad)}{\quad} \sum_{j_i=j_{sa}+s-j_{sa}}^{l_i-l+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k+l_2+l_3-j_i}^{n_{is}+j_s-j_{ik}-l_{k1}} \\
 & \sum_{(n_{sa}=n+l_k+l_3-j_{sa}+1)}^{(n_{ik}+j_{ik}-j_{sa}-l_{k2})} \sum_{n_s=j_i+1}^{n_{sa}+j_{sa}-j_i} \\
 & \frac{(n_i-1)!}{(j_s-2)!(n_i-n_{is}+1)!} \cdot \\
 & \frac{(n_{is}-n_{ik}+1)!}{(j_{ik}-j_s+1)!(n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
 & \frac{(n_{ik}-n_{sa}-l_{k2}-1)!}{(j_{sa}-j_{ik}-1)!(n_{ik}+j_s-n_{sa}-j_{sa}-l_{k2})!} \cdot \\
 & \frac{(n_{sa}-n_s-l_{k3}-1)!}{(j_i-j_{sa}-1)!(n_{sa}+j_{sa}-n_s-j_i-l_{k3})!} \cdot \\
 & \frac{(n_s-1)!}{(l_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \\
 & \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \cdot \\
 & \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \cdot \\
 & \frac{(l_i+j_{sa}-l_{sa}-s)!}{(j_{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j_{sa}-s)!} \cdot \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} \cdot \\
 & \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}
 \end{aligned}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{lk}-1} \binom{(\quad)}{\quad} \sum_{j_i=j_{sa}+s-j_{sa}}$$

GÜLDENWA

$$\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 + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!} \cdot \frac{1}{(n + 2 \cdot j_s + j_{sa} - j_i - j^{sa} \cdot j_s^s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!} \cdot \frac{(D - n)!}{(D - j_i - n - n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} < j^{sa} + j_{sa}^{ik} - j_s \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa}^{ik} - j_s + j^{sa} + s - 1 \leq j_i \leq j_{ik} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa} - j_{sa} = l_{ik} \wedge l_{sa} + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k}_1 = 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa}^{ik} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa} - \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, \dots, \mathbb{k}_3, j_{sa}\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fz_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)} \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(j_i+j_{sa}-s)} \sum_{(j^{sa}=l_{sa}+n-D)}^{l_s+s-l} \sum_{j_i=l_i+n-D}$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{i_k}=n+l_{k_2}+l_{k_3}-j_{i_k}+1}^{n_{i_s}+j_s-j_{i_k}-l_{k_1}} \\
 & \sum_{(n_{s_a}=n+l_{k_3}-j^{s_a}+1)}^{(n_{i_k}+j_{i_k}-j^{s_a}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{s_a}+j^{s_a}-j_i-l_{k_3}} \\
 & \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \\
 & \frac{(n_{i_s} - n_{i_k} - 1)!}{(j_{i_k} - j_s - 1)! \cdot (n_{i_s} - n_{i_k} - j_{i_k})!} \cdot \\
 & \frac{(n_{i_k} - n_{s_a} - 1)!}{(j^{s_a} - j_{i_k} - 1)! \cdot (n_{i_k} + j_{i_k} - n_{s_a} - j^{s_a} - l_{k_2})!} \cdot \\
 & \frac{(n_{s_a} - n_s - 1)!}{(j_i - j^{s_a} - 1)! \cdot (n_{i_k} + j^{s_a} - n_s - l_{k_3})!} \cdot \\
 & \frac{(n_s - 1)!}{(n_i + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_i - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{i_k} - l_s - j_{s_a}^{i_k} + 1)!}{(j_s + j_{i_k} - j_{i_k} - l_s)! \cdot (j_{i_k} - j_s - j_{s_a}^{i_k} + 1)!} \cdot \\
 & \frac{(l_i + j_{s_a} - l_{s_a} - s)!}{(j^{s_a} + l_i - j_i - l_{s_a})! \cdot (j_i + j_{s_a} - j^{s_a} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)} \\
 & \sum_{j_{i_k}=j^{s_a}+j_{s_a}^{i_k}-j_{s_a}} \sum_{(j^{s_a}=l_{s_a}+n-D)}^{(l_{s_a}-l+1)} \sum_{j_i=l_s+s-l+1}^{l_i-l+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{i_k}=n+l_{k_2}+l_{k_3}-j_{i_k}+1}^{n_{i_s}+j_s-j_{i_k}-l_{k_1}}
 \end{aligned}$$

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$$\begin{aligned}
 & \sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-k_2) \\ (n_{sa}=n+k_3-j^{sa}+1)}} \sum_{\substack{n_{sa}+j^{sa}-j_i-k_3 \\ n_s=n-j_i+1}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_s)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_s - k_2)!} \cdot \\
 & \frac{(n_{sa} - n_{sa} - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!} \cdot \\
 & \frac{(n_s - 1)!}{(n - j_i - 1)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - j_{sa}^{ik} + 1)!}{(j_s + j_{ik} - l_{ik} - 1)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} - l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=l}^{(\quad)} \sum_{\substack{(\quad) \\ (j_s=j_{ik}-j_{sa}^{ik}+1)}} \\
 & \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\quad)} \sum_{\substack{(\quad) \\ (j^{sa}=j_i+j_{sa}-s)}} \sum_{j_i=l_i+n-D}^{l_s+s-l} \\
 & \sum_{n_i=n+k}^n \sum_{\substack{(n_i-j_s+1) \\ (n_{is}=n+k-j_s+1)}} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1} \\
 & \sum_{\substack{(\quad) \\ (n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}}^{(\quad)} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3}
 \end{aligned}$$

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$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!} \cdot \frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!} \cdot \frac{(D - l)!}{(D + j_i - n - l_i)! (n - j_i)!}$$

$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa}^{sa}$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s \leq l_{sa} \wedge$

$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$

$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{ik} - 1 < j_{sa} - 1$

$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$fz^S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)} \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(l_i+n+j_{sa}-D-s-1)} \sum_{(j^{sa}=l_{sa}+n-D)} \sum_{j_i=l_i+n-D}^{l_i-l+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2 - 1)!} \cdot \\
 & \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3 - 1)!} \cdot \\
 & \frac{(n_s + j_i - n - 1)!}{(n_s + j_i - n - 1)!} \cdot \\
 & \frac{(n_s - l - 1)!}{(n_s - l - 1)!} \cdot (j_s - 2)! \cdot \\
 & \frac{(l_{ik} - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{sa}^{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_i - j_{sa} - l_{sa} - s)!}{(j_s + l_i - j_i - l_s - 1)! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)} \\
 & \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)} \sum_{j_i=j^{sa}+s-j_{sa}}^{(l_s+j_{sa}-l)} \sum_{j_i=l-1}^{l_i-l+1} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}
 \end{aligned}$$

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$$\begin{aligned}
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i - 1)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j^{sa} - 1)!}{(j_s + l_{ik} - j_{ik} - l_s - j^{sa} - 1)! \cdot (j_{ik} - j_s - l + 1)!} \cdot \\
 & \frac{(l_i + j_{sa} - l_s - j^{sa} - s)!}{(j^{sa} + l_i - j_s - l + 1)! \cdot (j_i + j_s - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_s - 1)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{(l_s - l + 1)} \sum_{(j_s=2)}^{(l_s - l + 1)} \\
 & \sum_{j_{ik}=j_s+l-j^{sa}-j_{sa}-j_{sa}-j_{sa}}^{(l_{sa}-l+1)} \sum_{(j^{sa}=l_s+j_{sa}-l+1)}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i-l+1} \\
 & \sum_{n_i=n+l_{\mathbb{k}}}^n \sum_{(n_{is}=n+l_{\mathbb{k}}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_{\mathbb{k}_2}+l_{\mathbb{k}_3}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{\mathbb{k}_1}} \\
 & \sum_{(n_{sa}=n+l_{\mathbb{k}_3}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_{\mathbb{k}_2})} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-l_{\mathbb{k}_3}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot
 \end{aligned}$$

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$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$fz^S j_s, j_{ik}, j_{sa}^{ik} = \sum_{l=1}^{k+1} \sum_{(j_s=2)}^{l-1} \sum_{j_{ik}=l_{ik}+n}^{n+j_{sa}^{ik}-D-s} \sum_{(j_{sa}=j_{sa}^i-j_{sa}^{ik})}^{l-1} \sum_{j_i=l_i+n-D}^{l-1} \sum_{n_i=n}^n \sum_{(n_{is}=n+k_1+1)}^{(n_i-1)} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_{sa}=n+k_3-j_{sa}^{ik}+1)}^{(n_{ik}+j_{ik}-j_{sa}^{ik}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j_{sa}^i-j_i-k_3} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa}^{ik} - k_2)!} \cdot \frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa}^i - n_s - j_i - k_3)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l}^{j_{ik} - j_{sa}^{ik} + 1} \sum_{s=2}^{j_{ik} - j_{sa}^{ik} + 1} \sum_{j_{ik} = l_i + n + j_{sa}^{lk} - D}^{l_s + j_{sa}^{lk} - l} \sum_{j_{ik} + j_{sa} - j_s = j^{sa} + s - j_{sa}} \sum_{n_i = n + k}^{(n_i - j_i + 1) - k_1} \sum_{n_{is} = n + k_1 + k - j_s + 1}^{(n_{is} - n_{ik} - 1) - k_1} \sum_{n_{sa} = n + k_2 + k_3 - j_{ik} + 1}^{(n_{ik} - j_{sa} - k_2) - j_{sa} - k_2} \sum_{n_s = n - j_i + 1}^{(n_{sa} - k_3 - j^{sa} + 1) - j^{sa} + 1}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!}$$

$$\frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

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$$\begin{aligned}
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{(l_s - l + 1)} \sum_{(j_s = 2)}^{(l_s - l + 1)} \\
 & \sum_{j_{ik} = l_s + j_{sa}^{ik} - l + 1}^{l_{ik} - l + 1} \sum_{(j^{sa} = j_{ik} + j_{sa}^{ik} - l + 1)}^{(j^{sa} = j_{ik} + j_{sa}^{ik} - l + 1)} \sum_{(j_i = j^{sa} - j_{sa})}^{(j_i = j^{sa} - j_{sa})} \\
 & \sum_{n_i = n + k}^n \sum_{(n_i - j_s + 1)}^{(n_i - j_s + 1)} \sum_{(n_{is} + j_s - j_{ik})}^{(n_{is} + j_s - j_{ik})} \\
 & \sum_{(n_{ik} = n + k_3 - j_{ik} + 1)}^{(n_{ik} = n + k_3 - j_{ik} + 1)} \sum_{(n_{ik} = n + k_3 - j_{ik} + 1)}^{(n_{ik} = n + k_3 - j_{ik} + 1)} \sum_{(j_i - k_3)}^{(j_i - k_3)} \\
 & \sum_{(n_s = n - j_i + 1)}^{(n_s = n - j_i + 1)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(n_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -
 \end{aligned}$$

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$$\sum_{k=l} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{lk}-D-s}^{l_s+j_{sa}^{lk}-l} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j_{sa}+s-}$$

$$\sum_{n_i=n+lk}^n \sum_{(n_{is}=n+lk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{ik}-lk_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-lk_2)}^{()} \sum_{(n_{sa}+j_{sa}-j_i)}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j_{sa}^{lk} - lk_2 - \dots - 2 \cdot j_{sa}^s)!}{(n_i - lk_1 - lk_2 - \dots - lk_3)!} \cdot \frac{1}{(n + 2 \cdot j_s + j_{sa} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq 1 \wedge l_s \leq D - n - 1 \wedge$$

$$1 < j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_{sa}^{lk} + j_{sa}^{lk} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{lk} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{lk} \leq j_{sa} \leq j_i + j_{sa} \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{lk} + 1 > l_s \wedge l_{sa}^{lk} - j_{sa}^{lk} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < \dots \leq D + j_s + s - n - 1 \wedge$$

$$D < n \wedge I = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i \wedge j_{sa}^{lk} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{lk} - 1 \wedge$$

$$s: \{j_{sa}, k_1, j_{sa}^{lk}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$\begin{aligned}
 f_z S_{j_s, j_{ik}, j_{sa}, j_i} &= \sum_{k=l}^{(l_i+n-D-s)} \sum_{(j_s=2)}^{(l_i+n-D-s)} \\
 &\sum_{j_{ik}=l_{ik}-l+1}^{l_{ik}-l+1} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=l_i+n-D}^{l_i-l+1} \\
 &\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \\
 &\frac{(n_{ik}+j_{ik}-j_{sa}^{ik})! \cdot (n_{sa}+j_{sa}-j_i-k_3)!}{(n_{sa}=n+k_3-j_{sa}^{ik}+1)! \cdot (n_s=n-j_i-k_3)!} \\
 &\frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_{is}+j_s+1)!} \\
 &\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \\
 &\frac{(n_{ik}-n_{sa}-k_2-1)!}{(n_{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j_{sa}-k_2)!} \\
 &\frac{(n_{sa}-n_s-k_3-1)!}{(j_i-n_{sa}-1)! \cdot (n_{sa}+j_{sa}-n_s-j_i-k_3)!} \\
 &\frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \\
 &\frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \\
 &\frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \\
 &\frac{(l_i+j_{sa}-l_{sa}-s)!}{(j_{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j_{sa}-s)!} \\
 &\frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \\
 &\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-l+1)}
 \end{aligned}$$

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$$\begin{aligned}
 & \sum_{j_{ik}=j_s+j_{sa}^{lk}-1}^{l_{ik}-l+1} \binom{()}{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{lk}} \sum_{j_i=j_{sa}+s-j_{sa}}^{l_i-l+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k+l_3-j_i}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n+l_k+l_3-j_{sa}+1)}^{(n_{ik}+j_{ik}-j_{sa}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{sa}+j_{sa}-j_i-l_{k_2}} \\
 & \frac{(n_i-1)!}{(j_s-2)!(n_i-n_{is}+1)!} \cdot \\
 & \frac{(n_{is}-n_{ik}+1)!}{(j_{ik}-j_s+1)!(n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
 & \frac{(n_{ik}-n_{sa}-l_{k_2}-1)!}{(j_{sa}-j_{ik}-1)!(n_{ik}+j_s-n_{sa}-j_{sa}-l_{k_2})!} \cdot \\
 & \frac{(n_{sa}-n_s-l_{k_3}-1)!}{(j_i-j_{sa}-1)!(n_{sa}+j_{sa}-n_s-j_i-l_{k_3})!} \cdot \\
 & \frac{(n_s-1)!}{(l_s+j_i-n-1)!(n-j_i)!} \cdot \\
 & \frac{(l_s-l-1)!}{(l_s-j_s-l+1)!(j_s-2)!} \cdot \\
 & \frac{(l_{ik}-l_s-j_{sa}^{lk}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)!(j_{ik}-j_s-j_{sa}^{lk}+1)!} \cdot \\
 & \frac{(l_i+j_{sa}-l_{sa}-s)!}{(j_{sa}+l_i-j_i-l_{sa})!(j_i+j_{sa}-j_{sa}-s)!} \cdot \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)!(n-j_i)!} \cdot \\
 & \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_i+n-D-s+1)}
 \end{aligned}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{lk}-1} \binom{()}{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{lk}} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3} (n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - k_1 - k_2 - k_3 - 2 \cdot j_s)! \cdot \frac{1}{(n_i - n - k_1 - k_2 - k_3)!} \cdot \frac{1}{(n + 2 \cdot j_s + j_{sa} - j_i - j_s \cdot j_s)!} \cdot \frac{(l_i - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!} \cdot \frac{(D - l)!}{(D - j_i - n - l + 1)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$

$D + l_s + s - n - l_i + 1 \leq l \leq i \wedge l - 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} = 1 \wedge j_s \leq j_{ik} + j_{sa}^{ik} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_{sa} + j_{sa} - s > l_{sa} \wedge$

$D + s - n < l_i \leq D - l_s + s - n - 1$

$D \geq n < n \wedge l_i - k > 0$

$j_{sa}^{ik} = j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} < j_{sa}^{ik} - 1 \wedge j_{sa} = j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, k_1, \dots, k_2, j_s, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 0 \wedge s = s + 1$

$k_z: z = 3 \wedge k_z = k_1 + k_2 + k_3 \Rightarrow$

$$f^z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(l_{sa}-l+1)} \sum_{(j^{sa}=l_{sa}+n-D)}^{l_i-l+1} \sum_{j_i=l_i+n-D}$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_s+1) \\ (n_{i_s}=n+l_k-j_s+1)}} \sum_{\substack{n_{i_s}+j_s-j_{ik}-l_{k_1} \\ n_{ik}=n+l_{k_2}+l_{k_3}-j_{ik}+1}} \\
 & \sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-l_{k_2}) \\ (n_{sa}=n+l_{k_3}-j^{sa}+1)}} \sum_{\substack{n_{sa}+j^{sa}-j_i-l_{k_3} \\ n_s=n-j_i+1}} \\
 & \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \\
 & \frac{(n_{i_s} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{i_s} - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{sa} + j^{sa} - n_s - l_{k_3})!} \cdot \\
 & \frac{(n_s - 1)!}{(n_i + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + j_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=l}^{\binom{D}{k}} \sum_{\substack{(\binom{D-k}{j_s}) \\ (j_s=j_{ik}-j_{sa}^{ik}+1)}} \\
 & \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{\binom{D-k}{j_{ik}}} \sum_{\substack{(\binom{D-k-j_{ik}}{j^{sa}}) \\ (j^{sa}=j_i+j_{sa}-s)}} \sum_{j_i=l_i+n-D}^{l_s+s-l} \\
 & \sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_s+1) \\ (n_{i_s}=n+l_k-j_s+1)}} \sum_{n_{ik}=n_{i_s}+j_s-j_{ik}-l_{k_1}}
 \end{aligned}$$

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$$\frac{\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3} \binom{(\quad)}{\quad}}{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - k_1 - k_2 - k_3 - 2 \cdot j_{sa})!} \cdot \frac{1}{(n_i - n - k_1 - k_2 - k_3)!} \cdot \frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - 1)!}{(D + j_s - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l \neq i \wedge l_i \leq D + s - n \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = j_{sa} \wedge$

$D \geq n < n \wedge I = k > 0 \wedge$

$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 0 \wedge s = s + k$

$k_2 \cdot z = 3 \wedge k_1 + k_2 + k_3 \Rightarrow$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_{sa}=n+k_3-j^{sa}+1)}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)} \sum_{j_i=s+1}^{l_s+s-l} f_z^{S_{j_s, j_{ik}, j^{sa}, j_i}} = \sum_{k=l}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}^{(j_s-1)}$$

$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2 - 1)!} \cdot \\
 & \frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3 - 1)!} \cdot \\
 & \frac{(n_s + j_i - n - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(n_s - l - 1)!}{(n_s - l - 1)! \cdot (j_s - l - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - j_{sa}^{ik} - 1)!}{(j_s + l_{ik} - j_{sa}^{ik} - l_s - 1)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_{sa} + j_s - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{(l_s - l + 1)} \sum_{(j_s=2)} \\
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}-l+1} \sum_{(j^{sa}=j_i+j_{sa}-s)} \sum_{j_i=l_s+s-l+1}^{l_i-l+1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \\
 & \sum_{(n_{sa}=n+k_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-k_3} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
 \end{aligned}$$

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$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i - 1)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j^{sa} - 1)!}{(j_s + l_{ik} - j_{ik} - l_s - j^{sa} - 1)! \cdot (j_{ik} - j_s - j^{sa} + 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - 1)!}{(j_{ik} + l_{sa} - j^{sa} - j_{sa}^{ik} - 1)! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l}^{()} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j^{sa} = j_i + j_{sa} - s)} \sum_{j_i = s+1}^{l_s + s - l}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{()} \sum_{n_s = n_{sa} + j^{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}$$

$$\frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_z^S j_s, j_{sa}^{ik}, j_{sa}^i = \sum_{k=l}^{j_{ik}-j_{sa}^{ik}+1} \sum_{(j_s=2)}^{j_{sa}+j_{sa}^{ik}} \sum_{(l_s+j_{sa})}^{(l_s+j_{sa})} \sum_{(j_i=j_{sa}+s-j_{sa})}^{(l_s+j_{sa})} \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{(n_{is}=\mathbb{n}+\mathbb{k}-j_s+1)}^{(n_{is}=\mathbb{n}+\mathbb{k}-j_s+1)} \sum_{(n_{ik}=\mathbb{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1)}^{(n_{ik}=\mathbb{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1)} \sum_{(n_{sa}=\mathbb{n}+\mathbb{k}_3-j_{sa}+1)}^{(n_{sa}=\mathbb{n}+\mathbb{k}_3-j_{sa}+1)} \sum_{(n_s=\mathbb{n}-j_i+1)}^{(n_s=\mathbb{n}-j_i+1)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_s)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{k=l}^{l+1} \sum_{j_s=0}^{n-j_i-k} \sum_{j_{ik}=0}^{l_{ik}-l+1} \sum_{j^{sa}=0}^{n-j_i-k-1} \sum_{j_i=0}^{n-j_s-j_{sa}} \sum_{n_{is}=0}^n \sum_{n_{ik}=0}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{n_{sa}=0}^{n_{ik}-j^{sa}-l_{k_2}} \sum_{n_s=0}^{n_{sa}+j^{sa}-j_i-l_{k_3}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \frac{(n_{sa} - n_s - l_{k_3} - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - l_{k_3})!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

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$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()} \sum_{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}^{(l_s+j_{sa}-l)} \sum_{(j_{sa}=j_{sa}+1)}^{(j_{sa}-j_{sa})} \sum_{n_i=n+k}^n \sum_{(n_i=n+k)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n_i-k_1)}^{(n_{ik}=n_i-k_2)} \sum_{(n_{sa}=n_{ik}+j_{sa}-k_2)}^{(n_{sa}=n_{sa}+j_{sa}-j_i-k_3)} \frac{(n_i + 2 \cdot j_s + j_{sa} - j_{sa} - j_i - k_2 - k_3 - 2 \cdot j_{sa}^s)!}{(n_i - k_1 - k_2 - k_3)!} \cdot \frac{1}{(n + 2 \cdot j_s + j_{sa} - j_{sa} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l \leq D + s - n \wedge$$

$$1 \leq j \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{(l_s-l+1)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_1}^{n_{is}+j_s-\mathbb{k}-\mathbb{k}_1} \sum_{(n_{ik}+j_{ik}-j_{sa}^{ik}-\mathbb{k}_2)}^{n_{sa}+j^{sa}-j_{sa}^{ik}-\mathbb{k}_2} \sum_{(n_{is}-j_s+1)}^{(n_{is}+j_s-n_{ik}-j_{ik})}$$

$$\frac{(n_i - n_{is})}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_2 - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}^{(l_s-l+1)}$$

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$$\begin{aligned}
 & \sum_{j_{ik}=l_s+j_{sa}^{ik}-l+1}^{l_{ik}-l+1} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_{sa}-l+1)} \sum_{j_i=j_{sa}+s-j_{sa}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k+l_3-j_i}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n+l_{k_3}-j_{sa}+1)}^{(n_{ik}+j_{ik}-j_{sa}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{sa}+j_{sa}-j_i-l_{k_2}} \\
 & \frac{(n_i-1)!}{(j_s-2)!(n_i-n_{is}+1)!} \cdot \frac{(n_{is}-n_{ik}+1)!}{(j_{ik}-j_s+1)!(n_{is}+j_s-n_{ik}-j_{ik})!} \\
 & \frac{(n_{ik}-n_{sa}-l_{k_2}-1)!}{(j_{sa}-j_{ik}-1)!(n_{ik}+j_s-n_{sa}-j_{sa}-l_{k_2})!} \\
 & \frac{(n_{sa}-n_s-l_{k_3}-1)!}{(j_i-j_{sa}-1)!(n_{sa}+j_{sa}-n_s-j_i-l_{k_3})!} \\
 & \frac{(n_s-1)!}{(l_s+j_i-n-1)! \cdot (n-j_i)!} \\
 & \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \\
 & \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \\
 & \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j_{sa}-l_{ik})! \cdot (j_{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} \\
 & \sum_{k=l}^{(\quad)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)}
 \end{aligned}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-l} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\quad)} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3} \frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - k_1 - k_2 - k_3 - 2 \cdot j_s)!}{(n_i - n - k_1 - k_2 - k_3)!} \cdot \frac{1}{(n + 2 \cdot j_s + j_{sa} - j_i - j^{sa} \cdot j_{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!} \cdot \frac{(D - n)!}{(D - j_i - n - j_i)!}$$

$D \geq n < n \wedge l \neq i \wedge l_i \leq D + s - n \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} < j^{sa} + j_{sa}^{ik} - j_i \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa}^{ik} + s - j_i \leq j_i \leq j_{ik} \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa} - j_{sa} > l_{ik} \wedge j_{sa} - s = l_{sa} \wedge$

$D \geq n < n \wedge l = k > 0 \wedge$

$j_{sa} < j_{sa} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$

$s: (j_{sa}^s, k_1, j_{sa}^{ik}, k_2, j_{sa}, k_3, j_{sa}^i)$

$s \geq 1 \wedge s = s + k \wedge$

$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$

$$f^z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{l_{ik}-l+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1}$$

$$\frac{\sum_{(n_{sa}=n+l_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-l_3}}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_i-n_{is}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j_{ik}-l_2)!} \cdot \frac{(n_{sa}-n_{sa}-l_3-1)!}{(j_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-l_3)!} \cdot \frac{(n_s-1)!}{(n-j_i)!} \cdot \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \cdot \frac{(l_{ik}-j_{ik}-j_{sa}^{ik}+1)!}{(j_s+l_{sa}-j_{ik}-l_{ik})! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \cdot \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!}$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+l_3}^n \sum_{(n_{is}=n+l_3-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-l_3}$$

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$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!} \cdot \frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!} \cdot \frac{(D - l)!}{(D + j_i - n - l_i)! (n - j_i)!}$$

$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa}^{sa}$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s - l_{sa} \wedge$

$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$

$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{ik} - 1 < j_{sa} - 1$

$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_2: z \geq 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$fz^S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)} \sum_{j_{ik}=l_{ik}+n-D}^{j^{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j^{sa}=j_i + j_{sa} - s)} \sum_{j_i=l_i+n-D}^{l_s + s - l} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2 - 1)!} \cdot \\
 & \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3 - 1)!} \cdot \\
 & \frac{(n_s + j_i - n - 1)!}{(n_s + j_i - n - 1)!} \cdot \\
 & \frac{(n_s - l - 1)!}{(n_s - l - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - j_{sa}^{ik} - 1)!}{(j_s + l_{ik} - j_{sa}^{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_{sa} + j_s - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{(l_s - l + 1)} \sum_{(j_s=2)} \\
 & \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-l+1} \sum_{(j^{sa}=j_i+j_{sa}-s)} \sum_{j_i=l_s+s-l+1}^{l_i-l+1} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}
 \end{aligned}$$

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$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i - 1)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j^{sa} - 1)!}{(j_s + l_{ik} - j_{ik} - l_s - j^{sa} - 1)! \cdot (j_{ik} - j_s - j^{sa} + 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - 1)!}{(j_{ik} + l_{sa} - j^{sa} - j_{sa}^{ik} - 1)! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l}^{()} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{k=j^{sa} + j_{sa}^{ik} - j_{sa}}^{()} \sum_{(j^{sa} = j_i + j_{sa} - s)}^{()} \sum_{j_i = l_i + n - D}^{l_s + s - l}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{()} \sum_{n_s = n_{sa} + j^{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}$$

$$\frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$f_{z, \dots, j_{ik}, j_{sa}, j_{sa}^i} = \sum_{k=l}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)}^{(j_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik} = k + n - D}^{j_{sa}^{ik} - k - j_{sa}} \sum_{(j_s = l)}^{(l_s - j_{sa} - l)} \sum_{j_i = j_{sa} + s - j_{sa}}^{(j_s - j_{sa} - 1)}$$

$$\sum_{i=n+k}^{(n_i - j_s + 1)} \sum_{(n_{is} = n + k - j_s + 1)}^{(n_i + j_s - j_{ik} - k_1)} \sum_{n_{ik} = n + k_2 + k_3 - j_{ik} + 1}^{(n_{is} - n_{ik} - 1)!}$$

$$\sum_{(n_{sa} = n + k_3 - j_{sa} + 1)}^{(n_{ik} + j_{ik} - j_{sa} - k_2)} \sum_{n_s = n - j_i + 1}^{(n_{sa} + j_{sa} - j_i - k_3)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!}$$

$$\frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{sa})!}$$

$$\frac{(D + j_i - n - l_i)! \cdot (n - j_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{j_s=2}^{l_s-l+1} \sum_{j_i=l_{ik}+n-D}^{l_{ik}-l} \sum_{j_i=j^{sa}+s-j_{sa}}^{(l_i+j_{sa}^{ik}-s+1)}$$

$$\sum_{n+l_k}^{(n_i-j_s)} \sum_{(n_{is}=n+l_k-j_s+1)}^{n_{is}+j_s-j_{ik}-l_{k1}}$$

$$\sum_{(n_{sa}=n+l_{k3}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_{k2})} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-l_{k3}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_{sa} - l_{k2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k2})!}$$

$$\frac{(n_{sa} - n_s - l_{k3} - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - l_{k3})!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

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$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(l_s+D)} \sum_{n+j_{sa}-D}^{(n+l_s+D)} \sum_{j_i=j^{sa}+s-j_{sa}}^{(n+l_s+D)}$$

$$\sum_{n_i=n+l_k}^{(n+l_s+D)} \sum_{n+l_k-j_s}^{(n+l_s+D)} \sum_{j_{ik}=n+l_s+j_s-j_{ik}-l_{k_1}}^{(n+l_s+D)}$$

$$\sum_{(n+l_s+D)}^{(n+l_s+D)} \sum_{n_s=n_{sa}+j^{sa}-j_i-l_{k_3}}^{(n+l_s+D)}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - l_{k_1} - l_{k_2} - l_{k_3} - 2 \cdot j_{sa}^s)!}{(n - n - l_{k_1} - l_{k_2} - l_{k_3})!}$$

$$\frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D - n - l_i \neq l_i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=l}^{(j_{ik}-j_{sa}^{ik})} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik})}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_i+n+j_{sa}^{ik}-D-s-1} \sum_{(j_{sa}=l_i+n, \dots, D-s)}^{(l_i+j_{sa}-l-s)} \sum_{j_i=j_{sa}+s}^{(j_i+1)}$$

$$\sum_{n_i=n}^{(n_{is}=n+l_{ik}+1)} \sum_{n_{ik}=n}^{(n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)} \sum_{(n_{sa}=n_{ik}-j_{sa}+1)}^{(n_{sa}+j_{sa}-j_i-\mathbb{k}_3)} \sum_{n_s=n-j_i+1}^{(n_s+n-j_i+1)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!}$$

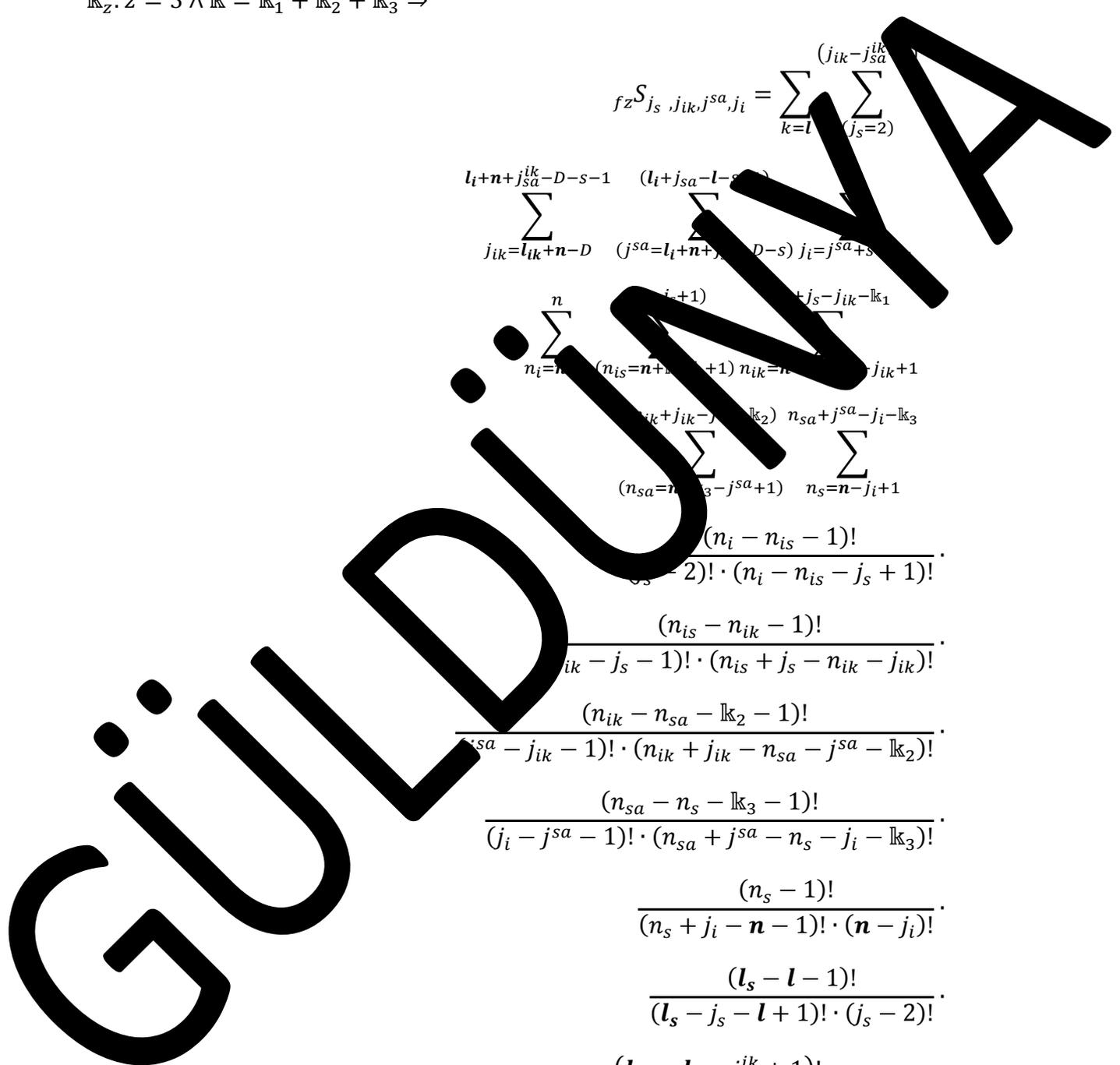
$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i - \mathbb{k}_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$



$$\begin{aligned}
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=l}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)}^{(j_{ik} - j_{sa}^{ik} + 1)} \\
& \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-l} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_i+j_{sa}-l-s+1)} \sum_{j_{sa}^{sa}+s-j_{sa}} \\
& \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3+1}^{n_{is}+j_s-k_1} \\
& \sum_{(n_{sa}=k_3-j_{sa}^{sa})}^{(n_{ik}+j_{ik}-j_{sa}^{sa}-k_1)} \sum_{j_i+1}^{n_{sa}+j_{sa}-j_i-k_2} \\
& \frac{(n_{is} - n_{is} - 1)!}{(j_s - 2)! \cdot (n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(n_{is} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!} \cdot \\
& \frac{(n_{sa} - n_s - k_3 - 1)!}{(j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i - k_3)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +
\end{aligned}$$

$$\begin{aligned}
 & \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)} \\
 & \sum_{j_{ik}=l_s+j_{sa}^{ik}-l+1}^{l_{ik}-l+1} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_i+j_{sa}-l-s+1)} \sum_{j_i=j_{sa}+s-j_{ik}} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \\
 & \sum_{(n_{sa}=n+k_3-j_{ik}+1)}^{(n_{ik}+j_{ik}-j_{sa}^{ik})} \sum_{(n_s=n-j_i)}^{(n_{sa}+j_{sa}-j_i-k_3)} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_s - 2)! \cdot (n_{is} + j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{ik} + j_s - n_{ik} - j_{ik})!} \\
 & \frac{(n_{ik} - n_s - k_2 - 1)!}{(n_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!} \cdot \frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i - k_3)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{k=l} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}
 \end{aligned}$$

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$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-l} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j_{sa}+s-j_{sa}}^{(n)}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}^{(n_i-j_s+1)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-k_2)}^{(n)} \sum_{n_s=n_{sa}+j_{sa}-j_i-k_3}^{(n_i-j_s+1)}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j_{sa} - j_i - k_1 - k_2 - k_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - k_1 - k_2 - k_3)!}$$

$$\frac{(n + 2 \cdot j_s - j_{sa} - j_i - 2 \cdot j_{sa}^s)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_s - l)!}{(n - l_i)!}$$

$$(D) \frac{(n - l_i)! \cdot (n - j_i)!}{(n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq j_i \wedge l_s \leq n - 1$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{ik} - 1 \leq j_{ik} = j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - j_{sa}^{ik} \wedge j_{sa} + j_{sa}^{ik} - j_{sa} \leq j_i \leq n \wedge$$

$$l_i - j_{sa}^{ik} + j_{sa} \geq l_s \wedge l_s + j_{sa}^{ik} - j_{sa} > l_i \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq l_i < n \wedge l = k_1 > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = k_1 + k_2 + k_3 \wedge$$

$$k_2 \wedge k_3 = k_1 + k_2 + k_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=l}^{(l_i+n-D-s)} \sum_{(j_s=2)}^{(n)}$$

$$\begin{aligned}
 & \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-l+1} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)}^{(l_i+j_{sa}-l-s+1)} \sum_{j_i=j^{sa}+s-j_{sa}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k+l_{k_2}+l_{k_3}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n+l_{k_3}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{(n_s=n-j_i+1)}^{(n_{sa}+j^{sa}-j_i)} \\
 & \frac{(n_i-1)!}{(j_s-2)! \cdot (n_i-n_{is}+1)!} \cdot \\
 & \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s+1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
 & \frac{(n_{ik}-n_{sa}-l_{k_2}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_s-n_{sa}-j^{sa}-l_{k_2})!} \cdot \\
 & \frac{(n_{sa}-n_s-l_{k_3}-1)!}{(j_i+j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-l_{k_3})!} \cdot \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \\
 & \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \cdot \\
 & \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \cdot \\
 & \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \\
 & \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_i+n-D-s+1)}
 \end{aligned}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{l_{ik}-l+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_i+j_{sa}-l-s+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

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$$\begin{aligned}
 & \sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n + k_2 + k_3 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - k_1} \\
 & \sum_{(n_{sa} = n + k_3 - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - k_2)} \sum_{n_s = n - j_i + 1}^{n_{sa} + j^{sa} - j_i - k_3} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{sa} + j^{sa} - n_s - k_3)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_{sa} + j_i - n_s - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + j_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=l}^{(l_s - l + 1)} \sum_{(j_s = l_i + n - D - s + 1)} \\
 & \sum_{j_{ik} = j_s + j_{sa}^{ik} - 1}^{()} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})} \sum_{j_i = j^{sa} + s - j_{sa}} \\
 & \sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - k_1}
 \end{aligned}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3} (n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - k_1 - k_2 - k_3 - 2 \cdot j_{sa}^s)! / (n_i - n - k_1 - k_2 - k_3)!$$

$$\frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - 1)!}{(D + j_{sa} - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} - l_i + j_{sa} - s = l_{sa} \wedge$

$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - 1 \wedge$

$D \geq n < n \wedge l = k > 0 \wedge$

$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^i = j_{sa}^{ik} - 1$

$s: \{j_{sa}^{s_1}, j_{sa}^{s_2}, \dots, j_{sa}^{s_k}, \dots, j_{sa}^{s_3}, j_{sa}^i\}$

$s \geq 6 \wedge s = s_1 + k \wedge$

$k_z = 3 \wedge k = k_1 + k_2 + k_3$

$$fz^{S_{j_s, j_{ik}, j^{sa}, j_i}} = \sum_{k=l}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{()}^{()} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_s+s-l}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1}$$

$$\begin{aligned}
 & \sum_{(n_{sa}=n+k_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-k_3} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{ik} - k_2)!} \cdot \\
 & \frac{(n_{sa} - n_{is} - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!} \cdot \\
 & \frac{(n_s - 1)!}{(n - j_i - 1)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - j_{ik} - j_{sa}^{ik} + 1)!}{(j_s + j_{ik} - j_{ik} - l_{ik})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +
 \end{aligned}$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-l+1} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{()} \sum_{j_i=l_s+s-l+1}^{l_{sa}+s-l-j_{sa}+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n+k_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-k_3}$$

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$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2 - 1)!} \cdot \\
 & \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
 & \frac{(n_s + j_i - n - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(n - l - 1)!}{(n - l - 1)! \cdot (j_s - l - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} + j_{ik} - j_{sa}^{ik} - 1)!}{(j_s + l_{ik} - j_{ik} - l_s) \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=l}^{(\quad)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)} \\
 & \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\quad)} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\quad)} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_s+s-l} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \\
 & \frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!} \cdot \\
 & \frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!} \cdot
 \end{aligned}$$

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$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_s+j_{sa}-l)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n+k_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-k_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\begin{aligned}
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i - 1)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j^{sa} - 1)!}{(j_s + l_{ik} - j_{ik} - l_s - j^{sa} - 1)! \cdot (j_{ik} - j_s - j^{sa} + 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - 1)!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik} - 1)! \cdot (j_{sa} + j_{sa} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i - 1)!}{(D + j_i - l_i - 1)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{(l_s - l + 1)} \sum_{(j_s=2)} \\
 & \sum_j^{l_{ik} - l + 1} \sum_{(j^{sa} = l_s + j_{sa} - l + 1)}^{(l_{sa} - l + 1)} \sum_{j_i = j^{sa} + s - j_{sa}} \\
 & \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \\
 & \sum_{(n_{sa} = n + \mathbb{k}_3 - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = n - j_i + 1}^{n_{sa} + j^{sa} - j_i - \mathbb{k}_3} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot
 \end{aligned}$$

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$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{sa})!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{k=0}^{(j_s - 1)} \sum_{i_k=j_{sa}+s-j_{sa}}^{(j_s - 1)} \sum_{i_s=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(l_s - l)} \sum_{i_s=l_{sa}+n-D}^{(l_s - l)} \sum_{i_k=j_{sa}+s-j_{sa}}^{(j_s - 1)} \sum_{i_s=n+l_k}^{(n_i - 1)} \sum_{i_s=n+l_k-j_s+1}^{(n_i - 1)} \sum_{i_k=n_{i_s}+j_s-j_{ik}-l_{k_1}}^{(n_i - 1)} \sum_{n_{sa}=n_{i_k}+j_{ik}-j^{sa}-l_{k_2}}^{(j_s - 1)} \sum_{n_s=n_{sa}+j^{sa}-j_i-l_{k_3}}^{(j_s - 1)} \frac{(j_i + j_s + j_{sa} - j^{sa} - j_i - l_{k_1} - l_{k_2} - l_{k_3} - 2 \cdot j_{sa}^s)!}{(n_i - n - l_{k_1} - l_{k_2} - l_{k_3})!} \cdot \frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

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$$fz^S j_s, j_{ik}, j_{sa}^{ik} = \sum_{l=1}^k \sum_{(j_s=2)}^{(k+1)}$$

$$l_{sa} + j_{sa}^{ik} - D - j_{sa} \quad (l_{sa} + j_{sa}^{ik} - D - j_{sa})$$

$$j_{ik} = l_{ik} + n \quad (j_{sa} = n - D) \quad j_i = j_{sa} + s - j_{sa}$$

$$\sum_{n_i=n}^n \sum_{(n_{is}=n+k_1+1)}^{(n_i-1)} \sum_{(n_{sa}+j_{sa}-j_{ik}-k_1)}^{(n_{sa}+j_{sa}-j_{ik}-k_1)}$$

$$\sum_{(n_{ik}+j_{ik}-j_{sa}-k_2)}^{(n_{ik}+j_{ik}-j_{sa}-k_2)} \sum_{(n_{sa}=n+k_3-j_{sa}+1)}^{(n_{sa}=n+k_3-j_{sa}+1)} \sum_{n_s=n-j_i+1}^{(n_s=n-j_i+1)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!}$$

$$\frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i - k_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l}^{k-j_{sa}^{ik}+1} \sum_{s=2}^{s=2}$$

$$\sum_{j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_s}^{l_s+j_{sa}^{ik}-l} \sum_{j_{sa}=j_{sa}-j_{sa}^{ik}+1}^{(l_{sa}-1)} \sum_{j_s=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+l_k}^{(n_i-1)} \sum_{n_{is}=n+l_k-j_s+1}^{(n_i-1)} \sum_{n_{ik}=n+l_k-j_{ik}+1}^{(n_i-1)}$$

$$\sum_{n_{ik}+j_{sa}-j^{sa}-l_{k_2}}^{(n_{ik}+j_{sa}-j^{sa}-l_{k_2})} \sum_{n_{sa}=j^{sa}-j_i-l_{k_3}}^{n_{sa}+j^{sa}-j_i-l_{k_3}} \sum_{n_s=n-j_i+1}^{(n_{k_3}-j^{sa}+1)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!}$$

$$\frac{(n_{sa} - n_s - l_{k_3} - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - l_{k_3})!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

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$$\begin{aligned}
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{(l_s - l + 1)} \sum_{(j_s = 2)}^{(l_s - l + 1)} \\
 & \sum_{j_{ik} = l_s + j_{sa}^{ik} - l + 1}^{l_{ik} - l + 1} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa})}^{(l_{sa} - l + 1)} \sum_{(j_{sa} = j_{sa})}^{(l_s - l + 1)} \\
 & \sum_{n_i = n + k}^n \sum_{(n_{is} = n - k)}^{(n_i - j_s + 1)} \sum_{(n_{is} + j_s - j_{ik} - k)}^{(n_{is} + j_s - j_{ik} - k)} \\
 & \sum_{(n_{ik} + j_{sa} - k_2)}^{(n_{ik} + j_{sa} - k_2)} \sum_{(n_{sa} = n - k_3 - j_i + 1)}^{(n_{sa} = n - k_3 - j_i + 1)} \\
 & \sum_{(n_s = n + k_3 - j_s)}^{(n_s = n + k_3 - j_s)} \sum_{n_s = n - j_i + 1}^{(n_s = n - j_i + 1)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -
 \end{aligned}$$

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$$\sum_{k=l} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa}}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j^{sa}+s-}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{(n_{sa}+j^{sa}-j_i)}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - k_2 - \dots - 2 \cdot j_{sa}^s)!}{(n_i - k_1 - k_2 - \dots - k_3)!} \cdot \frac{1}{(n + 2 \cdot j_s + j_{sa} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq 1 \wedge l_s \leq D - n - 1 \wedge$$

$$1 < j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_{sa}^{ik} + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_i \leq j_i + j_{sa} \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa}^{ik} - j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n - l_{sa} \leq D - l_s + j_{sa} - n - 1 \wedge$$

$$D > n \wedge I = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$\begin{aligned}
 fzS_{j_s, j_{ik}, j^{sa}, j_i} &= \sum_{k=l}^{(l_{sa}+n-D-j_{sa})} \sum_{(j_s=2)} \\
 &\sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-l+1} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+s-j} \\
 &\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2-k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \\
 &\frac{(n_{ik}+j_{ik}-j^{sa})! \cdot (n_{sa}+j_{sa}-j_i-k_3)}{(n_{sa}=n+k_3-k_1+1)! \cdot (n_s=n-j_i)} \\
 &\frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_{is}-j_s+1)!} \\
 &\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \\
 &\frac{(n_{ik}-n_{sa}-k_2-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}-j_{ik}-n_{sa}-j^{sa}-k_2)!} \\
 &\frac{(n_{sa}-n_s-k_3-1)!}{(j_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-k_3)!} \\
 &\frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \\
 &\frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \\
 &\frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \\
 &\frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \\
 &\frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \\
 &\sum_{k=l}^{(l_s-l-1)} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}
 \end{aligned}$$

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$$\begin{aligned}
 & \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{l_{ik}-l+1} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_{sa}-l+1)} \sum_{j_i=j_{sa}+s-j_{sa}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k+l_2+l_3-j_i}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n+l_k+l_3-j_{sa}+1)}^{(n_{ik}+j_{ik}-j_{sa}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{sa}+j_{sa}-j_i-l_{k_2}} \\
 & \frac{(n_i-1)!}{(j_s-2)!(n_i-n_{is}+1)!} \cdot \\
 & \frac{(n_{is}-n_{ik}+1)!}{(j_{ik}-j_s+1)!(n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
 & \frac{(n_{ik}-n_{sa}-l_{k_2}-1)!}{(j_{sa}-j_{ik}-1)!(n_{ik}+j_s-n_{sa}-j_{sa}-l_{k_2})!} \cdot \\
 & \frac{(n_{sa}-n_s-l_{k_3}-1)!}{(j_i-j_{sa}-1)!(n_{sa}+j_{sa}-n_s-j_i-l_{k_3})!} \cdot \\
 & \frac{(n_s-1)!}{(l_s+j_i-n-1)!(n-j_i)!} \cdot \\
 & \frac{(l_s-l-1)!}{(l_s-j_s-l+1)!(j_s-2)!} \cdot \\
 & \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)!(j_{ik}-j_s-j_{sa}^{ik}+1)!} \cdot \\
 & \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j_{sa}-l_{ik})!(j_{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)!(n-j_i)!} \cdot \\
 & \sum_{k=l}^{(l_s-l-1)} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)} \\
 & \sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j_{sa}+s-j_{sa}}
 \end{aligned}$$

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$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3} \frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - k_1 - k_2 - k_3 - 2 \cdot j_s)!}{(n_i - n - k_1 - k_2 - k_3)!} \cdot \frac{1}{(n + 2 \cdot j_s + j_{sa} - j_i - j_s \cdot j_s)!} \cdot \frac{(l_i - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!} \cdot \frac{(D - l)!}{(D - j_i - n - l + 1)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$

$D + l_s + s - n - l_i + 1 \leq l \leq i \wedge l - 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} = 1 \wedge j_s \leq j_{ik} + j_{sa}^{ik} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_{sa} + j_{sa} - s = l_{sa} \wedge$

$D + s - n < l_i \leq D - l_s + s - n - 1$

$D \geq n < n \wedge l_i - k > 0$

$j_{sa}^{ik} = j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} < j_{sa}^{ik} - 1 \wedge j_{sa} = j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, k_1, \dots, k_2, j_s, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 0 \wedge s = s + 1$

$k_z: z = 3 \wedge k_z = k_1 + k_2 + k_3 \Rightarrow$

$$f^z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-l+1} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{()} \sum_{j_i=l_i+n-D}^{l_i-l+1}$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{i_k}=n+l_{k_2}+l_{k_3}-j_{i_k}+1}^{n_{i_s}+j_s-j_{i_k}-l_{k_1}} \\
 & \sum_{(n_{s_a}=n+l_{k_3}-j^{s_a}+1)}^{(n_{i_k}+j_{i_k}-j^{s_a}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{s_a}+j^{s_a}-j_i-l_{k_3}} \\
 & \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \\
 & \frac{(n_{i_s} - n_{i_k} - 1)!}{(j_{i_k} - j_s - 1)! \cdot (n_{i_s} - n_{i_k} - j_{i_k})!} \cdot \\
 & \frac{(n_{i_k} - n_{s_a} - 1)!}{(j^{s_a} - j_{i_k} - 1)! \cdot (n_{i_k} + j_{i_k} - n_{s_a} - j^{s_a} - l_{k_2})!} \cdot \\
 & \frac{(n_{s_a} - n_s - 1)!}{(j_i - j^{s_a} - 1)! \cdot (n_{i_k} + j^{s_a} - n_s - l_{k_3})!} \cdot \\
 & \frac{(n_s - 1)!}{(n_{i_k} + j_i - n_s - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{i_k} - l_s - j_{s_a}^{i_k} + 1)!}{(j_s - j_{i_k} - j_{i_k} - l_s)! \cdot (j_{i_k} - j_s - j_{s_a}^{i_k} + 1)!} \cdot \\
 & \frac{(l_{s_a} + j_{s_a}^{i_k} - l_{i_k} - j_{s_a})!}{(j_{i_k} + l_{s_a} - j^{s_a} - l_{i_k})! \cdot (j^{s_a} + j_{s_a}^{i_k} - j_{i_k} - j_{s_a})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=l}^{()} \sum_{(j_s=j_{i_k}-j_{s_a}^{i_k}+1)}^{()} \\
 & \sum_{j_{i_k}=j^{s_a}+j_{s_a}^{i_k}-j_{s_a}}^{()} \sum_{(j^{s_a}=j_i+j_{s_a}-s)}^{()} \sum_{j_i=l_i+n-D}^{l_s+s-l} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{i_k}=n_{i_s}+j_s-j_{i_k}-l_{k_1}}
 \end{aligned}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3} (n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^s)! / (n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!$$

$$\frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - 1)!}{(D + j_s - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$

$D + l_s + s - n - l_i + 1 \leq l \leq i - 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} - s - j_{sa} \leq j_i \leq i \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} \leq l_i + j_{sa} - s = l_{sa} \wedge$

$D + s - n < l_i \leq D + l_s - n - 1 \wedge$

$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

$j_{sa} < i - 1 \wedge j_{sa}^{ik} - j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} \wedge$

$s \in \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^i\}$

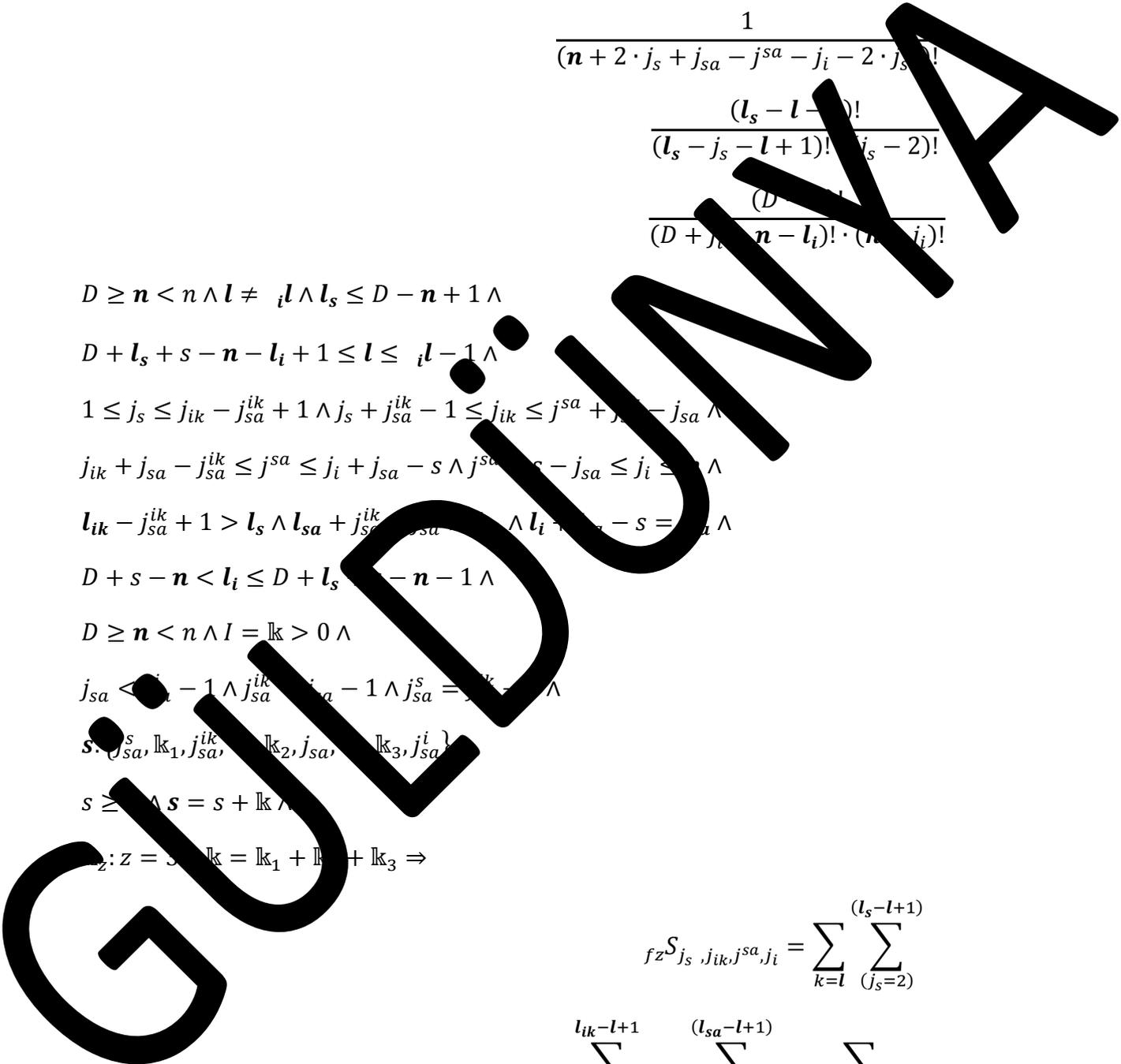
$s \geq 1 \wedge s = s + \mathbb{k} \wedge$

$z: z = j_{sa} \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$fz^S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-l+1} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$



$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-k_2) \\ (n_{sa}=n+k_3-j^{sa}+1)}} \sum_{\substack{n_{sa}+j^{sa}-j_i-k_3 \\ n_s=n-j_i+1}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{ik} - k_2)!} \cdot \frac{(n_{sa} - n_{ik} - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!} \cdot \frac{(n_s - 1)!}{(n - j_i - 1)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - j_{ik} - j_{sa}^{ik} + 1)!}{(j_s + j_{ik} - j_{ik} - l_{ik})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \sum_{k=1}^{(l_s-l+1)} \sum_{(j_s=l_i+n-D-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{\binom{()}{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}$$

$$\frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!}$$

$$\frac{(D - l)!}{(D + j_i - n - l_i)! (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$D + l_s + s - n - l_i + 1 \leq l \leq i \wedge l - 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i - n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} \wedge j_{sa}^s = j_{sa}^{ik} \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k}$$

$$\mathbb{k}_2 = 3 \wedge \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fz_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_s - l + 1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-l+1} \sum_{(j^{sa}=j_i+j_{sa}-s)} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{sa}+s-l-j_{sa}+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2 - 1)!} \cdot \\
 & \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
 & \frac{(n_s + j_i - n - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(n_s - l - 1)!}{(n_s - l - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} + j_{sa} - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{sa} - l_s) \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_{sa} + j_s - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=l}^{(\quad)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)} \\
 & \sum_{j_{ik}=j^{sa}+j_{sa}^{lk}-j_{sa}}^{(\quad)} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\quad)} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_s+s-l} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \\
 & \frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!} \cdot \\
 & \frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!} \cdot
 \end{aligned}$$

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$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$(D \geq n < n \wedge l \neq i \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$l_i \leq D + s - n)) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 0 \wedge s = s + \mathbb{k}_1$$

$$\mathbb{k}_2 \cdot z = 3 \wedge \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(j_i+j_{sa}-s)} \sum_{j_i=s+1}^{l_s+s-l}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\begin{aligned}
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2 - 1)!} \cdot \\
& \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3 - 1)!} \cdot \\
& \frac{(n_s + j_i - n - 1)!}{(j_s - l - 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - j_{sa}^{ik} - 1)!}{(j_s + l_{ik} - j_{sa}^{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(l_{sa} + j_s - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(l_{sa} + j_{sa} - l_{sa} - s)!}{(j_s + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=l}^{(l_s - l + 1)} \sum_{(j_s=2)} \\
& \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}-l+1} \sum_{(j^{sa}=j_{sa}+1)}^{(l_{sa}-l+1)} \sum_{j_i=l_s+s-l+1}^{l_i-l+1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
\end{aligned}$$

$$\begin{aligned}
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l - 1)!}{(l_s - j_i - l + 1)! \cdot (l - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa} + 1)!}{(j_s + l_{ik} - j_{sa} - 1)! \cdot (j_{ik} - j_{sa} - j^{ik} + 1)!} \cdot \\
 & \frac{(n_{sa} + j_{sa} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(l_i + l_{sa} - l_s - s)!}{(j^{sa} - l_i - j_i - l_s)! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=l} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()} \\
 & \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{()} \sum_{j_i=s+1}^{l_s+s-l} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \\
 & \frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!} \cdot \\
 & \frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!} \cdot
 \end{aligned}$$

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$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$(D \geq n < n \wedge l \neq i \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$l_i \leq D + s - n)) \wedge$$

$$D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 0 \wedge s = s + k_1$$

$$k_2 \cdot z = 3 \wedge k_1 + k_2 + k_3 \Rightarrow$$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(l_s+j_{sa}-l)} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i-l+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n+k_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-k_3}$$

$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2 - 1)!} \cdot \\
 & \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3 - 1)!} \cdot \\
 & \frac{(n_s + j_i - n - 1)!}{(n_s + j_i - n - 1)! \cdot (j_i - 1)!} \cdot \\
 & \frac{(n_s - l - 1)!}{(n_s - l - 1)! \cdot (j_s - l - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} + j_{ik} - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} + j_{ik} - l_{sa})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(l_{sa} + j_{sa} - l_{sa} - s)!}{(j_s + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{(l_s - l + 1)} \sum_{(j_s = 2)} \\
 & \sum_{j_{ik} = j_{sa}^{ik} + 1}^{l_{ik} - l + 1} \sum_{(j^{sa} = l_s + j_{sa} - l + 1)}^{(l_{sa} - l + 1)} \sum_{j_i = j^{sa} + s - j_{sa}}^{l_i - l + 1} \\
 & \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \\
 & \sum_{(n_{sa} = n + \mathbb{k}_3 - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = n - j_i + 1}^{n_{sa} + j^{sa} - j_i - \mathbb{k}_3} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
 \end{aligned}$$

GUIDANCE

$$\begin{aligned}
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l - 1)!}{(l_s - j_i - l + 1)! \cdot (l - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{sa}^{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(n_i + j_{sa}^{lk} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa}^{lk} - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} - l_i - j_i - l_s)! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=l}^{(\quad)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)} \\
 & \sum_{j_{ik}=j^{sa}+j_{sa}^{lk}-j_{sa}}^{(l_s+j_{sa}-l)} \sum_{(j^{sa}=j_{sa}+1)} \sum_{j_i=j^{sa}+s-j_{sa}} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \\
 & \frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!} \cdot \\
 & \frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!} \cdot
 \end{aligned}$$

GÜLDÜZMAYA

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$(D \geq n < n \wedge l \neq i \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$l_i \leq D + s - n)) \wedge$$

$$D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 0 \wedge s = s + k_1$$

$$k_2 \cdot z = 3 \wedge k_1 + k_2 + k_3 \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=l}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i-l+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n+k_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-k_3}$$

$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2 - 1)!} \cdot \\
 & \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3 - 1)!} \cdot \\
 & \frac{(n_s + j_i - n - 1)!}{(n_s + j_i - n - 1)!} \cdot \\
 & \frac{(n_s - l - 1)!}{(n_s - l - 1)!} \cdot (j_s - l - 1)! \cdot (j_s - 2)! \cdot \\
 & \frac{(l_{ik} + j_{ik} - j_{sa}^{ik} - 1)!}{(j_s + l_{ik} + j_{ik} - l_{sa})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(l_{sa} + j_{sa} - l_{sa} - s)!}{(j_s + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{(l_s - l + 1)} \sum_{(j_s = 2)} \\
 & \sum_{j_{ik} = l_s + j_{sa}^{ik} - l + 1}^{l_{ik} - l + 1} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}^{(l_{sa} - l + 1)} \sum_{j_i = j^{sa} + s - j_{sa}}^{l_i - l + 1} \\
 & \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \\
 & \sum_{(n_{sa} = n + \mathbb{k}_3 - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = n - j_i + 1}^{n_{sa} + j^{sa} - j_i - \mathbb{k}_3} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}
 \end{aligned}$$

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$$\begin{aligned}
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l - 1)!}{(l_s - j_i - l + 1)! \cdot (l - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa} + 1)!}{(j_s + l_{ik} - j_{sa} - l_{ik} + 1)! \cdot (j_{ik} - j_{sa} - j_{sa} + 1)!} \cdot \\
 & \frac{(j_s + l_{sa} + j_{sa} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j_s + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(l_i + j_s - l_{sa} - s)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=l} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()} \\
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j^{sa}+s-j_{sa}} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \\
 & \frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!} \cdot \\
 & \frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!} \cdot
 \end{aligned}$$

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$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$(D \geq n < n \wedge l \neq i \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$l_i \leq D + s - n)) \wedge$$

$$D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 0 \wedge s = s + k_1$$

$$k_2 \cdot z = 3 \wedge k_1 + k_2 + k_3 \Rightarrow$$

$$fz S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{l_{ik}-l+1} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_{sa}-l+1)} \sum_{j_i=j_{sa}^s+j_{sa}}^{l_i-l+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n+k_3-j_{sa}^s+1)}^{(n_{ik}+j_{ik}-j_{sa}^{ik}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j_{sa}^s-j_i-k_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2 - 1)!} \cdot \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3 - 1)!} \cdot \frac{(n_s + j_i - n - 1)!}{(n_s + j_i - n - 1)! \cdot (j_i - 1)!} \cdot \frac{(j_s - l - 1)!}{(j_s - l - 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} + j_{sa} - j_{sa}^{ik} - 1)!}{(j_s + l_{ik} - j_{sa}^{ik} - l_s - 1)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(l_{sa} + j_s - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(l_{sa} + j_{sa} - l_{sa} - s)!}{(j_i + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{k=l}^{(l_s - l + 1)} \sum_{(j_s = 2)}$$

$$\sum_{j_{ik} = j_s + j_{sa}^{ik} - 1} \sum_{\binom{()}{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}} \sum_{j_i = j^{sa} + s - j_{sa}}$$

$$\sum_{n_i = n + \mathbb{k}_1}^n \sum_{(n_{is} = n + \mathbb{k}_1 - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = n_{sa} + j^{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}$$

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$$\frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - l_i - 1)!}$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n - j_{sa} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n - j_{sa} \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \wedge$$

$$D \geq n < n \wedge l = i \wedge l_s > 0 \wedge$$

$$j_s < j_{sa}^{ik} - j_{sa}^{ik} < j_{sa}^{ik} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, j_{sa}^{ik}, \dots, j_{sa}^{ik}\} \wedge$$

$$s \geq 6, j_{sa}^s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k}_z = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{j^{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j^{sa}=l_{sa}+n-D)}^{(j_i + j_{sa} - s)} \sum_{j_i=l_i+n-D}^{l_s + s - l}$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{i_k}=n+l_{k_2}+l_{k_3}-j_{i_k}+1}^{n_{i_s}+j_s-j_{i_k}-l_{k_1}} \\
 & \sum_{(n_{s_a}=n+l_{k_3}-j^{s_a}+1)}^{(n_{i_k}+j_{i_k}-j^{s_a}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{s_a}+j^{s_a}-j_i-l_{k_3}} \\
 & \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \\
 & \frac{(n_{i_s} - n_{i_k} - 1)!}{(j_{i_k} - j_s - 1)! \cdot (n_{i_s} - n_{i_k} - j_{i_k})!} \cdot \\
 & \frac{(n_{i_k} - n_{s_a} - 1)!}{(j^{s_a} - j_{i_k} - 1)! \cdot (n_{i_k} + j_{i_k} - n_{s_a} - j^{s_a} - l_{k_2})!} \cdot \\
 & \frac{(n_{s_a} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{i_k} + j^{s_a} - n_s - l_{k_3})!} \cdot \\
 & \frac{(n_s - 1)!}{(n_i + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_i - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{i_k} - l_s - j_{s_a}^{i_k} + 1)!}{(j_s + l_{i_k} - j_{i_k} - l_s)! \cdot (j_{i_k} - j_s - j_{s_a}^{i_k} + 1)!} \cdot \\
 & \frac{(l_{s_a} + j_{s_a}^{i_k} - l_{i_k} - j_{s_a})!}{(j_{i_k} + l_{s_a} - j^{s_a} - l_{i_k})! \cdot (j^{s_a} + j_{s_a}^{i_k} - j_{i_k} - j_{s_a})!} \cdot \\
 & \frac{(l_i + j_{s_a} - l_{s_a} - s)!}{(j^{s_a} + l_i - j_i - l_{s_a})! \cdot (j_i + j_{s_a} - j^{s_a} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +
 \end{aligned}$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{i_k}=l_{i_k}+n-D}^{l_{i_k}-l+1} \sum_{(j^{s_a}=l_{s_a}+n-D)}^{(l_{s_a}-l+1)} \sum_{j_i=l_s+s-l+1}^{l_i-l+1}$$

GÜLDENYA

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_s+1) \\ (n_{i_s}=n+l_k-j_s+1)}} \sum_{\substack{n_{i_s}+j_s-j_{ik}-l_{k_1} \\ n_{ik}=n+l_{k_2}+l_{k_3}-j_{ik}+1}} \\
 & \sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-l_{k_2}) \\ (n_{sa}=n+l_{k_3}-j^{sa}+1)}} \sum_{\substack{n_{sa}+j^{sa}-j_i-l_{k_3} \\ n_s=n-j_i+1}} \\
 & \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \\
 & \frac{(n_{i_s} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{i_s} - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{sa} + j^{sa} - n_s - l_{k_3})!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot
 \end{aligned}$$

$$\sum_{k=l}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{()} \sum_{j_i=l_i+n-D}^{l_s+s-l}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3} \frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - k_1 - k_2 - k_3 - 2 \cdot j_s)!}{(n_i - n - k_1 - k_2 - k_3)!} \cdot \frac{1}{(n + 2 \cdot j_s + j_{sa} - j_i - j_s \cdot j_{sa})!} \cdot \frac{(l_i - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!} \cdot \frac{(D - n)!}{(D - j_i - n - n - j_i)!}$$

$$\begin{aligned} & ((D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge \\ & 1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa} > j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge \\ & D + s - n < l_i \leq D + l_s + s - n - 1) \vee \\ & (D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge \\ & 1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge \\ & l_i - s + 1 > l_s \wedge \\ & D + s - n < l_i \leq D + l_s + s - n - 1) \wedge \\ & D \geq n < n \wedge l = k > 0 \wedge \\ & j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{ik} = j_{sa}^{ik} - 1 \wedge \\ & s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge \\ & s \geq 6 \wedge s = s + k \wedge \\ & k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow \end{aligned}$$

$$\begin{aligned}
 f_{z^S} S_{j_s, j_{ik}, j^{sa}, j_i} &= \sum_{k=l}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)} \\
 &\sum_{j_{ik}=l_{ik}+n-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_i+n+j_{sa}-D-s-1)} \sum_{j_i=l_i+n}^{l_i-l+1} \\
 &\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2}^{n_{is}+j_s-j_{ik}-k_1} \sum_{j_i=n_i-k_3}^{n_{is}+j_s-j_{ik}-k_1} \\
 &\frac{(n_{ik}+j_{ik}-j^{sa})! \cdot (n_{sa}+j^{sa}-n_s-j_i-k_3)!}{(n_{sa}=n+k_3-1)! \cdot (n_s=n-j_i-k_3)!} \cdot \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \\
 &\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}-j_s-n_{ik}-j_{ik})!} \cdot \frac{(n_{ik}-n_{sa}-k_2-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}-j_{ik}-n_{sa}-j^{sa}-k_2)!} \\
 &\frac{(n_{sa}-n_s-k_3-1)!}{(j_i-n_{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-k_3)!} \cdot \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \\
 &\frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \cdot \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \\
 &\frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot \frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!} \\
 &\frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} +
 \end{aligned}$$

GÜLDÜZÜMÜ

$$\begin{aligned}
& \sum_{k=l}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)} \\
& \sum_{j_{ik}=l_{ik}+n-D}^{j_{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(l_s+j_{sa}-l)}^{(l_s+j_{sa}-l)} \sum_{j_i=j_{sa}+s-}^{l_i-l+1} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k-}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
& \frac{(n_{ik}+j_{ik}-j_{sa}^{ik})! \cdot (n_{sa}+j_{sa}^{ik}-j_{ik}-l_{k_1})!}{(n_{sa}=n+l_{k_3}-j_{ik}-1)! \cdot (n_s=n-j_i+l_{k_3}-j_{ik}+1)!} \\
& \frac{(n_i-n_{ik}-1)!}{(j_s-2)! \cdot (n_{is}-n_{ik}-j_s+1)!} \\
& \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}-j_s-n_{ik}-j_{ik})!} \\
& \frac{(n_{ik}-n_{sa}-l_{k_2}-1)!}{(j_{sa}-j_{ik}-1)! \cdot (n_{ik}-j_{ik}-n_{sa}-j_{sa}-l_{k_2})!} \\
& \frac{(n_{sa}-n_s-l_{k_3}-1)!}{(j_i-j_{sa}-1)! \cdot (n_{sa}+j_{sa}-n_s-j_i-l_{k_3})!} \\
& \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \\
& \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \\
& \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \\
& \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j_{sa}-l_{ik})! \cdot (j_{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \\
& \frac{(l_i+j_{sa}-l_{sa}-s)!}{(j_{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j_{sa}-s)!} \\
& \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} +
\end{aligned}$$

$$\begin{aligned}
 & \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}^{(l_s-l+1)} \\
 & \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-l+1} \sum_{(j^{sa}=l_s+j_{sa}-l+1)}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+s-j}^{l_i-l+1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k-k_2-k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \\
 & \sum_{(n_{sa}=n+k_3-k_2-k_1+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i}^{n_{sa}+j_{sa}-j_i-k_3} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_s - 2)! \cdot (n_{ik} - j_s + 1)!} \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - k_2)!} \\
 & \frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

GÜLDÜZ

YAYIN

$$\sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{lk}-j_{sa}}^{(l_s+j_{sa}-l)} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)}^{(l_s+j_{sa}-l)} \sum_{j_i=j^{sa}+s-j_{sa}}^{(\cdot)}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-k_1}^{(\cdot)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{(\cdot)} \sum_{(n_{sa}=n_{sa}+j^{sa}-j_i)}^{(\cdot)}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - k_2 - j_s - 2 \cdot j_{sa}^s)!}{(n_i + n - k_1 - k_2 - j_s - 2 \cdot j_{sa}^s)!} \cdot \frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\left((D \geq n < n \wedge l_i \neq l_s \wedge l_s \leq D - n + 1 \wedge 1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge l_i - j_{sa}^{ik} - 1 > l_s \wedge l_{sa} > j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge D + s - n < l_i \leq D + l_s + s - n - 1) \vee (D \geq n < n \wedge l_i \neq l_s \wedge l_s \leq D - n + 1 \wedge 1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge l_i - s + 1 > l_s \wedge (D + s - n < l_i \leq D + l_s + s - n - 1)) \wedge D \geq n < n \wedge l_i = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_z^S j_s, j_{ik}, j_{sa}, j_i = \sum_{k=l}^{(j_{ik}-j_{sa}^{ik})} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik})} \sum_{j_{ik}=l_{ik}+n-D}^{l_i+n+j_{sa}^{ik}-D-s-1} \sum_{(j_s=l_{ik}+n-D)}^{(l_s+l+1)} \sum_{j_i=l_i+1}^{l+1} \sum_{n_i=n}^n \frac{(n_{is}=n+l_{ik}+1) (n_{ik}=n+j_{ik}+1)}{(n_{is}=n+l_{ik}+1) (n_{ik}=n+j_{ik}+1)} \frac{(n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2) (n_{sa}+j_{sa}-j_i-\mathbb{k}_3)}{(n_{sa}=n-\mathbb{k}_3-j_{sa}+1) (n_s=n-j_i+1)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i - \mathbb{k}_3)!} \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\begin{aligned}
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)}^{(j_{ik} - j_{sa}^{ik} + 1)} \\
 & \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_{sa}-l+1)} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n-k)}^{(n_i-j_s+1)} \sum_{(n_{is}+j_s-j_{ik}-k)}^{(n_{is}+j_s-j_{ik}-k)} \\
 & \sum_{(n_{ik}+j_{ik}-j^{sa}-k_2)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{(n_{sa}=n-j_i-k_3)}^{(n_{sa}=n-j_i-k_3)} \\
 & \sum_{(n_s=n-j_i+1)}^{(n_s=n-j_i+1)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}
 \end{aligned}$$

GÜLDENWA

$$\begin{aligned}
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{(l_s - l + 1)} \sum_{j_s=2}^{(l_s - l + 1)} \\
 & \sum_{j_{ik}=l_s + j_{sa}^{ik} - l + 1}^{l_{ik} - l + 1} \sum_{(j^{sa} = j_{ik} + j_{sa} - l + 1)}^{(l_{sa} - l + 1)} \sum_{(j_i = j^{sa} - j_{sa})}^{(l_s - l + 1)} \\
 & \sum_{n_i=n+k}^n \sum_{(n_i - j_s + 1)}^{(n_i - j_s + 1)} \sum_{(n_{is} + j_s - j_{ik} - 1)}^{(n_{is} + j_s - j_{ik} - 1)} \\
 & \sum_{(n_{ik} + j_s - j^{sa} - k_2)}^{(n_{ik} + j_s - j^{sa} - k_2)} \sum_{(j_i - k_3)}^{(j_i - k_3)} \\
 & \sum_{(n_{is} + k_3 - j_s - 1)}^{(n_{is} + k_3 - j_s - 1)} \sum_{n_s=n-j_i+1}^{(n_s = n - j_i + 1)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(n_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

GÜLDÜZÜMÜ

A

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\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})}^{(\)} \sum_{j_{sa}^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_{sa}^{ik})}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s}^{l_{k1}}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - l_{k1} - l_{k2} - l_{k3} - 2 \cdot j_{sa}^s)!}{(n_i - n - l_{k1} - l_{k2} - l_{k3} - j_i - l_{k3})!}$$

$$\frac{1}{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_i \neq l_s \wedge l_i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n \leq l_i \leq D + l_s + s - n - 1) \vee$$

$$(D < n \wedge l_i \neq l_s \wedge l_i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$(D + s - n < l_i \leq D + l_s + s - n - 1) \wedge$$

$$D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$fz^S j_s, j_{ik}, j_{sa}, j_i = \sum_{k=l}^{(l_s - D - s)} \sum_{j_i = n + k}^{(n_i - j_s + 1)} \sum_{j_{ik} = l_{ik} + 1}^{(l_{ik} - l + 1)} \sum_{j_{sa} = l_{sa} + 1}^{(l_{sa} - 1)} \sum_{j_i = n - D}^{(l_i - l + 1)} \sum_{n_{is} = n + k_1}^{(n_i + j_s - j_{ik} - k_1)} \sum_{n_{ik} = n + k_2 + k_3 - j_{ik} + 1}^{(n_{ik} + j_{sa} - k_2)} \sum_{n_{sa} = n + k_3 - j_{sa} + 1}^{(n_{sa} + j_{sa} - j_i - k_3)} \sum_{n_s = n - j_i + 1}^{(n_s - 1)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!}$$

$$\frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\begin{aligned}
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=0}^{(l_i - l + 1)} \binom{l_i - l + 1}{k} (j_s = l_i + n - j_i - s + 1) \\
 & \sum_{j_{ik} = j_s + j_{sa}^{ik}}^{l_{ik} - l + 1} \binom{l_{ik} - l + 1}{j_{ik} - j_s - j_{sa}^{ik}} (j^{sa} = j_{ik} + j_{sa} - j_i) \sum_{j_i = j^{sa} + s - j_{sa}}^{(l_i - l + 1)} \\
 & \sum_{n_i = n + l_k}^n \binom{n}{n_i} \sum_{n_{is} = n + l_k - j_s + j_{sa}^{ik}}^{(n_{ik} + 1)} \sum_{n_{ik} = n + l_{k_2} + l_{k_3} - j_{ik} + 1}^{(n_{ik} + 1)} \binom{n_{ik} + 1}{n_{ik} - j^{sa} - l_{k_2}} \sum_{n_{sa} = j^{sa} - j_i - l_{k_3}}^{(n_{sa} + 1)} \binom{n_{sa} + 1}{n_{sa} = j^{sa} + 1} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - n_s - l_{k_3} - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - l_{k_3})!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}
 \end{aligned}$$

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$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l}^{(l_s - l + 1)} \sum_{(j_s = l_i + n - D - s + k)}$$

$$\sum_{j_{ik} = j_s + j_{sa}^{ik} - 1}^{()} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_s)} \sum_{(j_i = j^{sa} - j_{sa})}$$

$$\sum_{n_i = n + k}^n \sum_{(n_i - j_s + 1 - k)}^{(n_i - j_s + 1)} \sum_{(n_{ik} = n_i - j_s + 1 - k)}^{(n_i - j_s + 1)} \sum_{(j_s - j_{ik} - k_1)}$$

$$\sum_{(n_{sa} = n_{ik} - j^{sa} - k_2)}^{()} \sum_{(n_{sa} + j^{sa} - j_i - k_3)}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - k_1 - k_2 - k_3 - 2 \cdot j_{sa}^s)!}{(n_i + n - k_1 - k_2 - k_3)!}$$

$$\frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$(D \geq n < n \wedge l \neq i l \wedge l_s \leq D - n + 1 \wedge$$

$$D + l + s - n - l_i + 1 \leq l \leq i l - 1 \wedge$$

$$1 - j_s \leq j_s - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i l \wedge l_s \leq D - n + 1 \wedge$$

$$D + l_s + s - n - l_i + 1 \leq l \leq i l - 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$\begin{aligned}
 & f^{z=j_{sa}^{ik}, j_{sa}^{ik}, j_{sa}^{ik}, j_i} \sum_{k=1}^{(l_s-l+1)} \sum_{(j_s=2)} \\
 & \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-l} \sum_{j_{sa}=l_{sa}+n-D}^{(l_{sa}-l)} \sum_{j_i=l_i+n-D}^{l_i-l+1} \\
 & \sum_{n_{i_s}=n+\mathbb{k}-j_s+1}^{n} \sum_{n_{i_k}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{i_s}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \\
 & \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \\
 & \frac{(n_{i_s} - n_{i_k} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{i_s} + j_s - n_{i_k} - j_{ik})!} \cdot \\
 & \frac{(n_{i_k} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{i_k} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot
 \end{aligned}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(l_i + j_{sa} - l_{sa} - s)}{(j_{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - l_{sa} - s)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{k=l}^{(l_s - l + 1)} \sum_{j=j_s + 1}^{(j_s - s + 1)} \sum_{j_s + j_{sa}^{lk} - 1}^{(j_{sa} + j_{sa}^{lk} - j_{sa} - j_{sa}^{lk})} \sum_{j_i = j_{sa} + s - j_{sa}}^{(n_i - l - 1)} \sum_{n + \mathbb{k}}^{(n_{is} = n + \mathbb{k} - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}^{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)} \sum_{n_s = n_{sa} + j_{sa} - j_i - \mathbb{k}_3}^{(n_i + j_s + j_{sa} - j_{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^s)!} \cdot \frac{1}{(n + 2 \cdot j_s + j_{sa} - j_{sa} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l = i \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$\sum_{k=1}^{(\cdot)}$$

$$\sum_{i=s}^{(\cdot)} l_i - i + 1$$

$$\sum_{i=k=j_{sa}^{ik}}^{n} (n_i - j_{ik} - k_1 + 1)$$

$$\sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{n_{ik}+j_{sa}^{ik}-k_2} (n_{sa}+j_{sa}^{ik}-j_i-k_3)$$

$$\sum_{n_{sa}=n+k_3-j_{sa}+1}^{(n_s=n-j_i+1)}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!}$$

$$\frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i - k_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(l_i + j_{sa} - j_i - l_{sa})! \cdot (j_i - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^n \sum_{j_s=1}^{()}$$

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_{sa})} \sum_{j_i}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{ik}=n_i-k_1+1)}^{()}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2} \sum_{(n_{sa}+j^{sa}-j_i)}^{()}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - k_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (n + 2 \cdot j_s - j_{sa} - j_i - k_3 - 2 \cdot j_{sa}^s)! \cdot (D - l_i)!}$$

$$(D + s - n - l_i)! \cdot (n - s)!$$

$$D \geq n < l = i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s \leq j_{sa}^{ik} - 1 \leq j_s \leq j_{sa}^{ik} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + j_{sa} \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$l_i \leq D + s - n \wedge$$

$$D \geq n < n \wedge l = i > 0 \wedge$$

$$j_{sa} < j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} < j_{sa}^{ik} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}^{ik}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq k_1 + k_2 + k_3 \wedge$$

$$k_2: z = 3 \wedge k_2 = k_1 + k_2 + k_3 \Rightarrow$$

$$f_z^S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^n \sum_{j_s=1}^{()}$$

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_{sa})} \sum_{j_i=l_i+n-D}^{l_i-i+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_i-j_{ik}-l_{k_1}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} (n_{ik}=n+l_{k_2}+l_{k_3}-j_{ik}+1)$$

$$\sum_{n_{sa}=n+l_{k_3}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \sum_{(n_s=n-j_i+1)}^{(n_{sa}+j^{sa}-j_i-l_{k_3})}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j^{sa} - l_{k_2})!}$$

$$\frac{(n_{sa} - n_s - l_{k_3} - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - l_{k_3})!}$$

$$\frac{(n_s - j_i - n - l_i - 1)!}{(n_s - j_i - n - l_i - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(l_i + j_{sa} - j_i - l_{sa})! \cdot (j_i - s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l}^{()} \sum_{(j_s=1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_{sa})} \sum_{j_i=s}^{()}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n_i-j_{ik}-l_{k_1}+1)}^{()}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \sum_{(n_s=n_{sa}+j^{sa}-j_i-l_{k_3})}^{()}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - l_{k_1} - l_{k_2} - l_{k_3} - 2 \cdot j_{sa}^s)!}{(n_i - n - l_{k_1} - l_{k_2} - l_{k_3})! \cdot (n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

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$$D \geq n < n \wedge l = i l \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

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$$\sum_{k=1}^{()} \sum_{j_i=1}^{l_i - i l + 1} \sum_{j_{ik}=1}^{n} \sum_{n_{ik}=n+k}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa}=n+k_3 - j^{sa} + 1}^{(n_{sa} + j^{sa} - j_i - k_3)} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} - j_{sa})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l}^{()} \sum_{(j_s=1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j_{sa})} \sum_{j_i=s}$$

$$\sum_{n_i=0}^n \sum_{\mathbb{k}} (n_{ik}=n_i - j_{ik} + 1)$$

$$\sum_{()} \sum_{()} \sum_{()}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_{ik} - \mathbb{k}_1 - \mathbb{k}_2 + \mathbb{k}_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l = l \wedge l_i = 0 + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq a + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa} \leq j_{ik} \leq j_i + j_{sa} - s \wedge j_{sa}^{ik} - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_{sa} \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} = 0 \wedge$$

$$j_{sa} < j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} < j_s - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_s^s, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}^s, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fz S_{j_s, j_{ik}, j_{sa}^i, j_i} = \sum_{k=l}^{()} \sum_{(j_s=1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_{sa})} \sum_{j_i=j^{sa}+s-j_{sa}} \binom{l_{sa}-l_i+1}{j_i}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_k+l_{k_3}-j_i)} \binom{n_i-j_{ik}-l_{k_1}+1}{n_i}$$

$$\sum_{n_{sa}=n+l_{k_3}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \sum_{(n_s=n_{sa}+j^{sa}-j_i-l_{k_3})} \binom{n_{sa}+j^{sa}-j_i-l_{k_3}}{n_s}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - 1)!}$$

$$\frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} - n_{sa} - j^{sa} - l_{k_2})!}$$

$$\frac{(n_{sa} - n_{s} - l_{k_3} - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - l_{k_3})!}$$

$$\frac{(n_s - 1)!}{(n_s - j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} - j_{sa})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l}^{()} \sum_{(j_s=1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_{sa})} \sum_{j_i=s}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n_i-j_{ik}-l_{k_1}+1)} \binom{()}{n_i}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \sum_{(n_s=n_{sa}+j^{sa}-j_i-l_{k_3})} \binom{()}{n_s}$$

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$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l = l_i \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)} \sum_{j_i=s}^{l_i-l+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n+\mathbb{k}_3-j^{sa}+1} \sum_{(n_s=n-j_i+1)}^{(n_{sa}+j^{sa}-j_i-\mathbb{k}_3)} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{(j_s)} \binom{()}{j_s=1}$$

$$\sum_{j_{ik}=j_s} \sum_{j_{sa}^{ik}=j_{sa}} \sum_{j_i=s}$$

$$\sum_{n_i=n}^n \sum_{(n_{ik}=n_i - j_{ik} - \mathbb{k}_1 + 1)}$$

$$\sum_{n_s=n_{ik}+j_{ik}-\mathbb{k}_2} \sum_{(n_s=n_{sa}+j_{sa}^{ik}-j_i-\mathbb{k}_3)}$$

$$\frac{(n_i - 2 \cdot j_s + j_{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + 2 \cdot j_s + j_{sa} - j_{sa}^{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l = l \wedge l_i \leq l + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_{ik} + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n - l = \mathbb{k} > 0 \wedge$$

$$j_s - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fzS_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=i}^{\binom{D}{l}} \sum_{(j_s=1)}^{\binom{D}{l}}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{\binom{l_{sa}-l+1}{j_{sa}^{ik}=j_{sa}}} \sum_{j_i=j^{sa}+s}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2+j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)}$$

$$\sum_{n_{sa}=n+k_3-j^{sa}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)}$$

$$\frac{n_{ik}!}{(j_{ik}-1)! \cdot (n_i-j_{ik}+1)!}$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j_{ik}-j_{ik}-1)! \cdot (n_i+j_{ik}-n_{sa}-j^{sa}-k_2)!}$$

$$\frac{(n_{sa}-n_{sa}-k_3-1)!}{(j_{sa}-j^{sa}-1)! \cdot (n_i+j^{sa}-n_s-j_i-k_3)!}$$

$$\frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!}$$

$$\frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(l_{ik}-j_{ik}-l_s+1)! \cdot (j_{ik}-j_{sa}^{ik})!}$$

$$\frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!}$$

$$\sum_{k=i}^{\binom{D}{l}} \sum_{(j_s=1)}^{\binom{D}{l}}$$

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_{sa})}^{\binom{D}{l}} \sum_{j_i=s}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{ik}=n_i-j_{ik}-k_1+1)}^{\binom{D}{l}}$$

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$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{\binom{()}{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}} \frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - l_i)!}$$

$$D \geq n < n \wedge l = i \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} = l_{sa} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{\binom{()}{l}} \sum_{j_s=1}^{\binom{()}{l}}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{l_{ik}-i+1} \sum_{\binom{()}{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{\binom{()}{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}}^{(n_i-j_{ik}-\mathbb{k}_1+1)}$$

$$\sum_{n_{sa}=n+\mathbb{k}_3-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{\binom{()}{n_s=n-j_i+1}}^{(n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{l_i} \binom{()}{j_{sa}^{ik}}$$

$$\sum_{j_{ik}=j_{sa}^{ik}} \binom{()}{j_{sa}^{ik}}$$

$$\sum_{n+\mathbb{k}}^n \binom{()}{(n_{ik}=n_i - j_{ik} - \mathbb{k}_1 + 1)}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \binom{()}{(n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}$$

$$\frac{(n_i + 2 \cdot j_s^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^s)!}{(n_i + n - \mathbb{k}_1 - \mathbb{k}_2 - j_i - \mathbb{k}_3 - 2 \cdot j_{sa}^s)! \cdot (n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l = l_i \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_i \leq j_{ik} - j_{sa}^{ik} \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_i - j_{sa}^{ik} = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fz^{\mathcal{S}}_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=i}^{\binom{D}{k}} \sum_{(j_s=1)}^{\binom{D-k}{j_s}} \sum_{j_{ik}=j_{sa}^{ik}}^{\binom{l_{sa}-i+1}{j_{ik}}} \sum_{(j^{sa}=j_{sa})}^{\binom{l_i-i+1}{j^{sa}}} \sum_{j_i=s}^{\binom{n_i-j_{ik}+1}{j_i}} \sum_{n_i=n_i+k}^{\binom{n_i-k+1}{n_i}} \sum_{n_{sa}=n_{sa}+k}^{\binom{n_{sa}+j^{sa}-j_i}{n_{sa}}} \sum_{n_i+n_{sa}+k}^{\binom{n_i+n_{sa}-j_i+1}{n_i+n_{sa}}} \frac{(n_{ik}-n_{ik}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}-j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!} \cdot \frac{(n_{ik}-n_{ik}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}-j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!} \cdot \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(l_{sa}+j_{sa}^{ik}-j^{sa}-l_{ik})! \cdot (j^{sa}-j_{sa})!} \cdot \frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!} \cdot \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} \sum_{k=i}^{\binom{D}{k}} \sum_{(j_s=1)}^{\binom{D-k}{j_s}} \sum_{j_{ik}=j_{sa}^{ik}}^{\binom{l_{sa}-i+1}{j_{ik}}} \sum_{(j^{sa}=j_{sa})}^{\binom{l_i-i+1}{j^{sa}}} \sum_{j_i=s}^{\binom{n_i-j_{ik}+1}{j_i}}$$

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$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\cdot)}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}^{(\cdot)}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(D - l_i)}{(D + s - l_i)! (n - s)!}$$

$D \geq n < n \wedge l = i \wedge l_i \leq D + s - n \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + \dots \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i - j_{sa} \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - j_{sa} > l_{sa}$

$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{ik} - 1 < j_{sa} - 1$

$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_2: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$fz^S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^n \sum_{(j_s=1)}^{(\cdot)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa})}^{(l_{sa}-i+1)} \sum_{j_i=s}^{l_{i-}-i+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}$$

$$\sum_{n_{sa}=n+\mathbb{k}_3-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=n-j_i+1)}^{(n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{sa} - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{sa} - j_{sa}^{ik})!} \cdot \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_{sa} - s)! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{k=l}^{()} \sum_{j_s=1}^{()} \sum_{j_{ik}=j_{sa}^{ik}}^{()} \sum_{j^{sa}=j_{sa}}^{()} \sum_{j_i=s}^{()} \sum_{n_i=n+\mathbb{k}}^n \sum_{n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1}^{()} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}^{()} \frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l = l \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

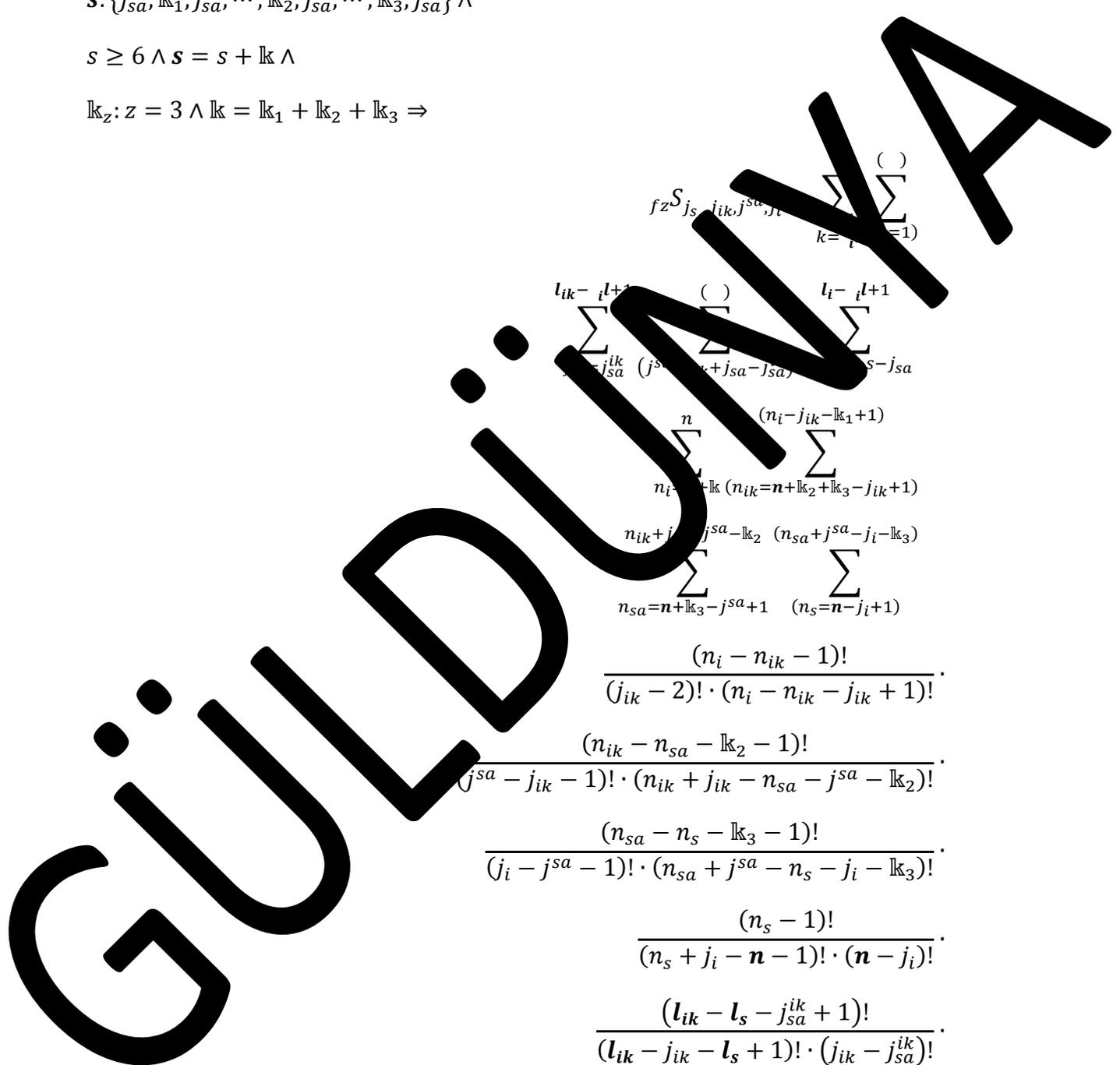
$$D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$



$$fz^s j_{sa}^{ik} j_{sa}^{ik} j_{sa}^{ik} \sum_{k=1}^{(\cdot)} \sum_{i=1}^{(\cdot)}$$

$$l_{ik} - i^{l+1} \sum_{j_{sa}^{ik}}^{(\cdot)} (j_{sa}^{ik} + j_{sa} - j_{sa})^{s-j_{sa}}$$

$$l_i - i^{l+1} \sum_{n_i}^{n} \sum_{(n_{ik}=n+k_2+k_3-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)}$$

$$n_{ik} + j_{sa} - k_2 \sum_{n_{sa}=n+k_3-j_{sa}+1}^{(n_{sa}+j_{sa}-j_i-k_3)} \sum_{(n_s=n-j_i+1)}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!}$$

$$\frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i - k_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j_{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j_{sa} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=i}^{\binom{D}{l}} \sum_{(j_s=1)}^{\binom{D}{l}}$$

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_{sa})} \sum_{j_i}$$

$$\sum_{n_i=n+l}^n \sum_{(n_{ik}=n_i-l-k_1+1)}^{\binom{D}{l}}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2} \sum_{(n_{sa}+j^{sa}-j_i)}^{\binom{D}{l}}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - k_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (n + 2 \cdot j_s - j_{sa} - j_i - k_3 - 2 \cdot j_{sa}^s)! \cdot (D - l_i)!}$$

$$\frac{(D + s - n - l_i)! \cdot (n - s)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l = i \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_{sa}^{ik} - 1 \leq j_s \leq j_{sa}^{ik} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > 0 \wedge l_{sa} + j_{sa}^{ik} - j_{sa} \leq l_{ik} \wedge l_i - j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge l = k > i \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa} < j_{sa} - 1 \wedge j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}^{ik}, \dots, k_2, j_{sa}^i, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = k + k \wedge$$

$$k_2: k \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=i}^{\binom{D}{l}} \sum_{(j_s=1)}^{\binom{D}{l}}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{l_{ik}-i+1} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\binom{D}{l}} \sum_{j_i=s}^{l_i-i+1}$$

$$\sum_{n_i=n+\mathbb{k}_1}^n \sum_{(n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}$$

$$\sum_{n_{sa}=n+\mathbb{k}_3-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=n-j_i+1)}^{(n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}$$

$$\frac{(n_s - j_i - n - j_i - 1)!}{(n_s - j_i - n - j_i - 1)!}$$

$$\frac{(l_{ik} - j_{sa} - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{sa} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} - j_{sa} - j_{sa}^{ik} - j_{sa})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=i}^{()} \sum_{(j_s=1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_{sa})} \sum_{j_i=s}$$

$$\sum_{n_i=n+\mathbb{k}_1}^n \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{()}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}^{()}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!}$$

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$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l = l \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$\begin{aligned} & \sum_{k=l}^n \sum_{(j_s=1)}^{(\cdot)} j_{ik}^{sa}, j_{ik}, j_{sa}^{sa} \\ & \sum_{j_{ik}=j_{sa}^{ik}}^{l_{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(n-s-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}} \\ & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \\ & \sum_{n_{sa}=n+\mathbb{k}_3-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=n-j_i+1)}^{(n_{sa}+j^{sa}-j_i-\mathbb{k}_3)} \\ & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\ & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\ & \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\ & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \end{aligned}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \sum_{k=1}^{(j_s)} \sum_{j_{ik}=j_{sa}^{ik}}^{(j_s)} \sum_{j_i=s}^{(j_s)} \sum_{n_i=n}^n \sum_{n_{ik}=n_i - j_{ik} - k_1 + 1}^{(j_s)} \sum_{n_s=n_{sa} + j_{sa}^{ik} - k_2}^{(j_s)} \sum_{n_s=n_{sa} + j_{sa}^{ik} - j_i - k_3}^{(j_s)} \frac{(n_i - 2 \cdot j_s + j_{sa} - j_{sa}^{ik} - j_i - k_1 - k_2 - k_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$D \geq n < n \wedge l = 1 \wedge l_i \leq 1 + s < n \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_{sa} + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$

$D \geq n < n \wedge l = k > 0 \wedge$

$j_{sa} - j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k \wedge$

$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$

$$fzS_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=i}^{\binom{D}{k}} \sum_{j_s=1}^{\binom{D-k}{j_s}}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{l_{ik}-i+1} \sum_{(j^{sa}=j_{sa})}^{(l_{sa}-i+1)} \sum_{j_i=s}^{l_i-i+1}$$

$$\sum_{n_i=n+k}^n \binom{n_i-j_{ik}-k_1+1}{n_{ik}=n+k_2+j_{ik}+1}$$

$$\sum_{n_{sa}=n+k_3-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-k_2} \binom{n_{sa}-j_{sa}-k_3}{n_s=n-j_i+1}$$

$$\frac{n_{ik}!}{(j_{ik}-1)! \cdot (n_i-j_{ik}-1)!}$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j_{ik}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-k_2)!}$$

$$\frac{(n_{sa}-n_{sa}-k_3-1)!}{(j_{sa}-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-k_3)!}$$

$$\frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!}$$

$$\frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(l_{ik}-j_{ik}-l_s+1)! \cdot (j_{ik}-j_{sa}^{ik})!}$$

$$\frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}$$

$$\frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!}$$

$$\frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!}$$

$$\sum_{k=i}^{\binom{D}{k}} \sum_{j_s=1}^{\binom{D-k}{j_s}}$$

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_{sa})} \sum_{j_i=s}$$

GÜLDÜZ

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{\binom{()}{n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1}}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{\binom{()}{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa})!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa})!}$$

$$\frac{(D - l_i)!}{(D + s - l_i)! \cdot (n - s)!}$$

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$$D \geq n < n \wedge l \neq i \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$S_{j_s, j_{ik}, j_{sa}^{ik}} = \sum_{k=1}^{(j_s - j_{ik} - j_{sa}^{ik} + 1)} \sum_{j_{ik} - j_{sa} + j_{sa}^{ik} - j_{sa} - k = j_{sa} + 1}^{(j_i + j_{sa} - l_{sa} + j_{sa} - l - s + 1)} \sum_{j_i = s + 1}^{(n - (j_s + 1))} \sum_{n_{is} = n + \mathbb{k} - j_s + 1}^{(n_{is} + j_s - j_{ik} - \mathbb{k}_1)} \sum_{n_{ik} = n + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_{sa} = n + \mathbb{k}_3 - j^{sa} + 1}^{(n_{sa} + j^{sa} - j_i - \mathbb{k}_3)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

GÜLDÜNKYA

$$\begin{aligned}
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{(j_s)} \sum_{(j_s=j_{sa}+1)}^{(j_s)} \sum_{(j_{sa}=j_{sa}+1)}^{(l_{sa}+1)} \sum_{(l_{sa}+j_{sa}-l-s+2)}^{(l_{sa}+1)} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik})}^{(j_{sa}=j_{sa}+1)} \sum_{(n_i=n+l_k)}^{(n_i=n+l_k-j_s+l_{sa}+1)} \sum_{(n_{ik}=n+l_k+l_{k_3}-j_{ik}+1)}^{(n_{ik}=n+l_k-j_s+l_{sa}+1)} \sum_{(n_{sa}=n+l_{k_3}-j^{sa}+1)}^{(n_{sa}=n+l_{k_3}-j^{sa}+1)} \sum_{(n_s=n-j_i+1)}^{(n_s=n-j_i+1)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - l_{k_1})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - n_s - l_{k_3} - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - l_{k_3})!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -
 \end{aligned}$$

GÜLDENYA

$$\begin{aligned}
 & \sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)} \\
 & \sum_{j_{ik}=j_{sa}+j_{sa}^{lk}-j_{sa}}^{(\cdot)} \sum_{(j_{sa}=j_i+j_{sa}-s)}^{(\cdot)} \sum_{j_i=s+1}^{l_{sa}+j_{sa}-l-s+1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-k_1} \\
 & \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-k_2)}^{(\cdot)} \sum_{(n_{sa}=n_{sa}+j_{sa}-j_i)} \\
 & \frac{(n_i + 2 \cdot j_s + j_{sa} - j_{sa}^{sa} - k_2 - k_3 - 2 \cdot j_{sa}^s)!}{(n_i + n - k_1 - k_2 - k_3)!} \\
 & \frac{1}{(n + 2 \cdot j_s + j_{sa} - j_{sa}^{sa} - j_i - 2 \cdot j_{sa}^s)!} \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

$$\begin{aligned}
 & D \geq n < n \wedge l \neq 1 \wedge l_i \leq D + s - n \wedge \\
 & 1 < j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_i + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge \\
 & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - 1 \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge \\
 & l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge \\
 & D \geq n < n - k_1 - k_2 - k_3 > \\
 & j_s - j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge \\
 & s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge \\
 & s \geq j_{sa}^s = s + k \wedge \\
 & k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow
 \end{aligned}$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)}$$

$$\begin{aligned}
 & \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(j_i+j_{sa}-s)} \sum_{j_i=s+1}^{l_{ik}+j_{sa}^{ik}-l-s+1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3-j_i}^{n_{is}+j_s-j_{ik}-k_1} \\
 & \sum_{(n_{sa}=n+k_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=j_i+1}^{n_{sa}+j^{sa}-j_i-1} \\
 & \frac{(n_i-1)!}{(j_s-2)! \cdot (n_i-n_{is}-1)!} \cdot \\
 & \frac{(n_i-n_{ik}-k_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_i-n_{ik}-j_{ik}-k_1)!} \cdot \\
 & \frac{(n_{ik}-n_{sa}-k_2-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-k_2)!} \cdot \\
 & \frac{(n_{sa}-n_s-k_3-1)!}{(j_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-k_3)!} \cdot \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \\
 & \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \cdot \\
 & \frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!} \cdot \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} +
 \end{aligned}$$

$$\sum_{k=l} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\begin{aligned}
 & \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(l_{ik}+j_{sa}-l-j_{sa}^{ik}+1)} \sum_{j_i=l_{ik}+j_{sa}^{ik}-l-s+2}^{l_i-l+1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1}
 \end{aligned}$$

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$$\frac{\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{ik} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_{is} - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_{is} - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n - j_i - 1)!} \cdot$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_i + j_i - l_{sa} - s)!}{(j^{sa} - l_i - j_i - l_s - 1)! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\sum_{k=l}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{()} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{()} \sum_{j_i=s+1}^{l_{ik}+j_{sa}^{ik}-l-s+1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=\mathbf{n}_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^s)!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}$$

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$$\frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - l_i)!}$$

$D \geq n < n \wedge l \neq i \wedge l_i \leq D + s - n \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$

$D \geq n < n \wedge l = k > 0 \wedge$

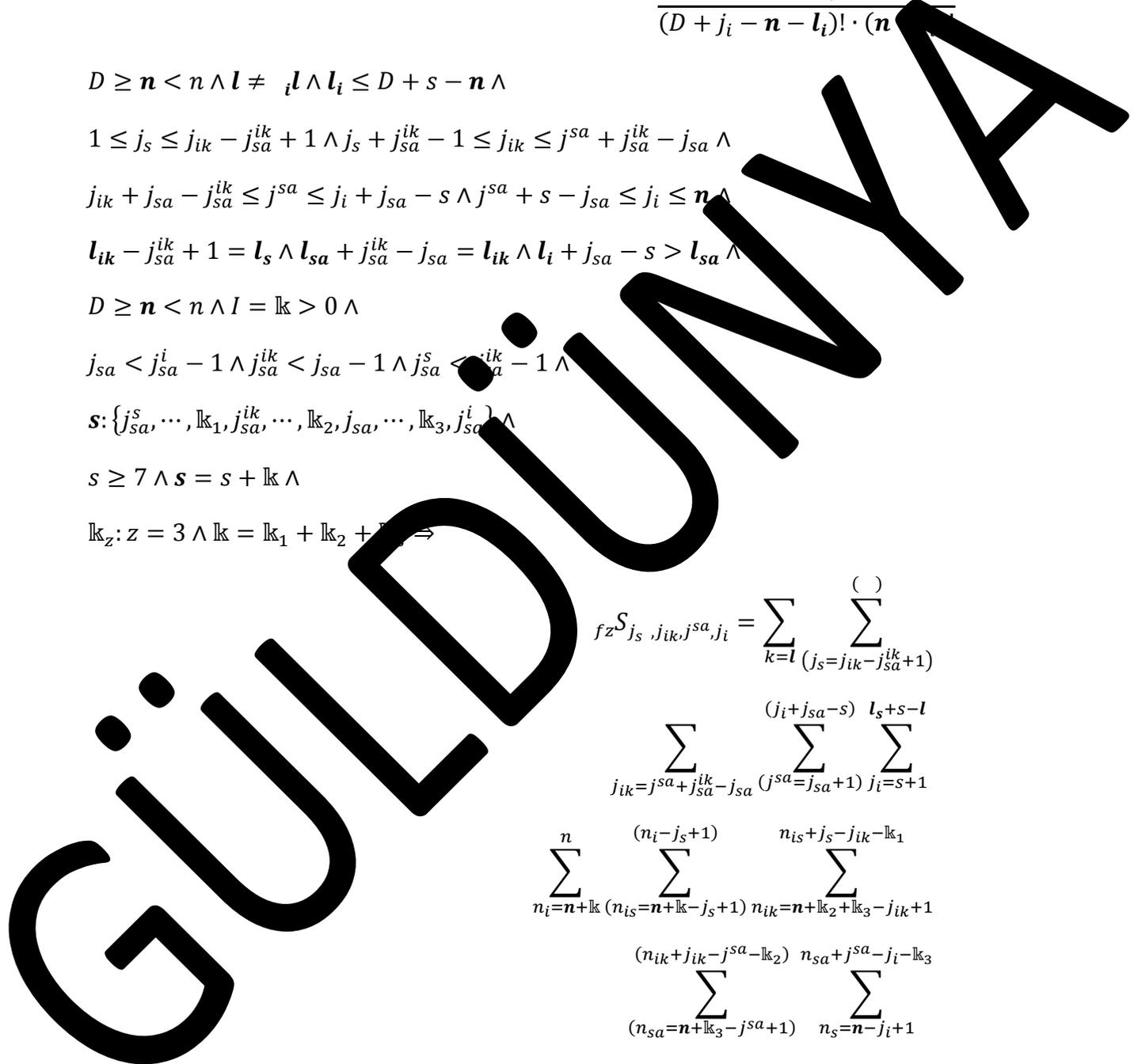
$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^i < j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 7 \wedge s = s + k \wedge$

$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$

$$fz S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)} \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(j_i+j_{sa}-s)} \sum_{(j^{sa}=j_{sa}+1)}^{l_s+s-l} \sum_{j_i=s+1}^{n} \sum_{(n_i=n+k)}^{(n_i-j_s+1)} \sum_{(n_{is}=n+k-j_s+1)}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_{sa}=n+k_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-k_3} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!}$$



$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i - 1)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i + j_{sa} - l - 1)!}{(j^{sa} + l_i - j_i - l_{sa} - 1)! \cdot (j_i + j_{sa} - l - 1)!}$$

$$\frac{(n - l_i)!}{(n - j_i - 1)! \cdot (n - j_i)!}$$

$$\sum_{j_s=l}^{j_s=j_{ik}-j_{sa}+1}$$

$$\sum_{j_{ik}=j_{sa}+1}^{l_s+j_{sa}-l} \sum_{j_i=l_s+s-l+1}^{l_i-l+1}$$

$$\sum_{n+l}^{n+l} \sum_{n_{is}=n+l-j_s+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{n_{ik}=n+l_2+l_3-j_{ik}+1}$$

$$\sum_{n_{sa}=n+l_3-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{k=l}^{(j_s)} \sum_{j_{sa}=j_{sa}+1}^{(j_s)} \sum_{j_{ik}=j_{sa}+1}^{(j_s)} \sum_{j_i=s+1}^{(j_s)} \sum_{n_i=n+l-k}^{(j_s)} \sum_{n_i=n+l-k-j_{ik}}^{(j_s)} \sum_{n_i=n+l-k-j_{ik}-k_1}^{(j_s)} \sum_{n_i=n+l-k-j_{ik}-k_2}^{(j_s)} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3}^{(j_s)} \frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - k_1 - k_2 - k_3 - 2 \cdot j_{sa}^s)!}{(n - k_1 - k_2 - k_3)!} \cdot \frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n \wedge l \neq i \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_i + j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$fz S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=l}^{(\quad)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+ \dots)}^{(\quad)}$$

$$\sum_{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}^{(l_{sa}-l+1)} \sum_{(j_{sa}^{ik}=j_{sa}^{ik}-j_{sa})}^{l-1} \sum_{i=j_s-j_{sa}}^{n-j_s}$$

$$\sum_{n_i=n+k}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{is}=j_s-j_{ik}}^{n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{ik}=n_{sa}+k_3-j_{ik}+1)}^{(n_{ik}=n_{sa}+k_3-j_{ik}+1)} \sum_{(n_{ik}-j_{sa}-k_2)}^{(n_{ik}-j_{sa}-k_2)} \sum_{(n_{ik}-j_i-k_3)}^{(n_{ik}-j_i-k_3)}$$

$$\sum_{(n_s=n+k_3-j_i+1)}^{(n_s=n+k_3-j_i+1)} \sum_{n_s=n-j_i+1}^{(n_s=n-j_i+1)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{ik} - k_1 - 1)!}{(j_{ik} - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(n_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!}$$

$$\frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i - k_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j_{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j_{sa} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)}$$

$$\sum_{j_{ik}=j_{sa}+j_{sa}^{lk}-j_{sa}}^{(l_{sa}-l+1)} \sum_{(j_{sa}=j_{sa}+1)} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+lk}^n \sum_{(n_{is}=n+lk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-lk_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-lk_2)}^{(\cdot)} \sum_{(n_{sa}=n_{sa}+j_{sa}-j_i)}^{(\cdot)}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j_{sa}^{sa} - lk_2 - j_{sa} - 2 \cdot j_{sa}^s)!}{(n_i + n - lk_1 - lk_2 - j_{sa} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{1}{(n + 2 \cdot j_s + j_{sa} - j_{sa}^{sa} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l \neq 1 \wedge l_i \leq D + s - n \wedge$
 $1 < j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_{sa} + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$
 $j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - j_{sa} \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$
 $l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$
 $D \geq n < n \wedge l = lk > 1 \wedge$
 $j_s - j_{sa} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$
 $s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \dots, lk_2, j_{sa}, \dots, lk_3, j_{sa}^i\} \wedge$
 $s \geq j_{sa} - s = s + lk \wedge$
 $lk_z: z = 3 \wedge lk = lk_1 + lk_2 + lk_3 \Rightarrow$

$$fz S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{lk}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(l_{ik}+j_{sa}^{lk}-l-s+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i-l+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k+l_{k_2}+l_{k_3}-j_i}^{n_{is}+j_s-j_{ik}-l_{k_1}}$$

$$\sum_{(n_{sa}=n+l_{k_3}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{n_s=j_i+1}^{n_{sa}+j^{sa}-j_i-l_{k_2}}$$

$$\frac{(n_i-1)!}{(j_s-2)! \cdot (n_i-n_{is}-1)!}$$

$$\frac{(n_i-n_{ik}-l_{k_1}-1)!}{(j_{ik}-j_s-1)! \cdot (n_i-n_{ik}-j_{ik}-l_{k_1})!}$$

$$\frac{(n_{ik}-n_{sa}-l_{k_2}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-l_{k_2})!}$$

$$\frac{(n_{sa}-l_{k_3}-1)!}{(j_i-j^{sa}-1)! \cdot (n_s+j^{sa}-n_s-j_i-l_{k_3})!}$$

$$\frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!}$$

$$\frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!}$$

$$\frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!}$$

$$\frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!}$$

$$\sum_{k=l}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{lk}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{lk}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(l_{ik}+j_{sa}^{lk}-l-s+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3} (n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^s)! / (n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!$$

$$\frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_s^s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - 1)!}{(D + j_s - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l \neq i \wedge l_i \leq D + s - n \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_i \wedge l_i + j_{sa} - s \geq j_{sa} \wedge$

$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

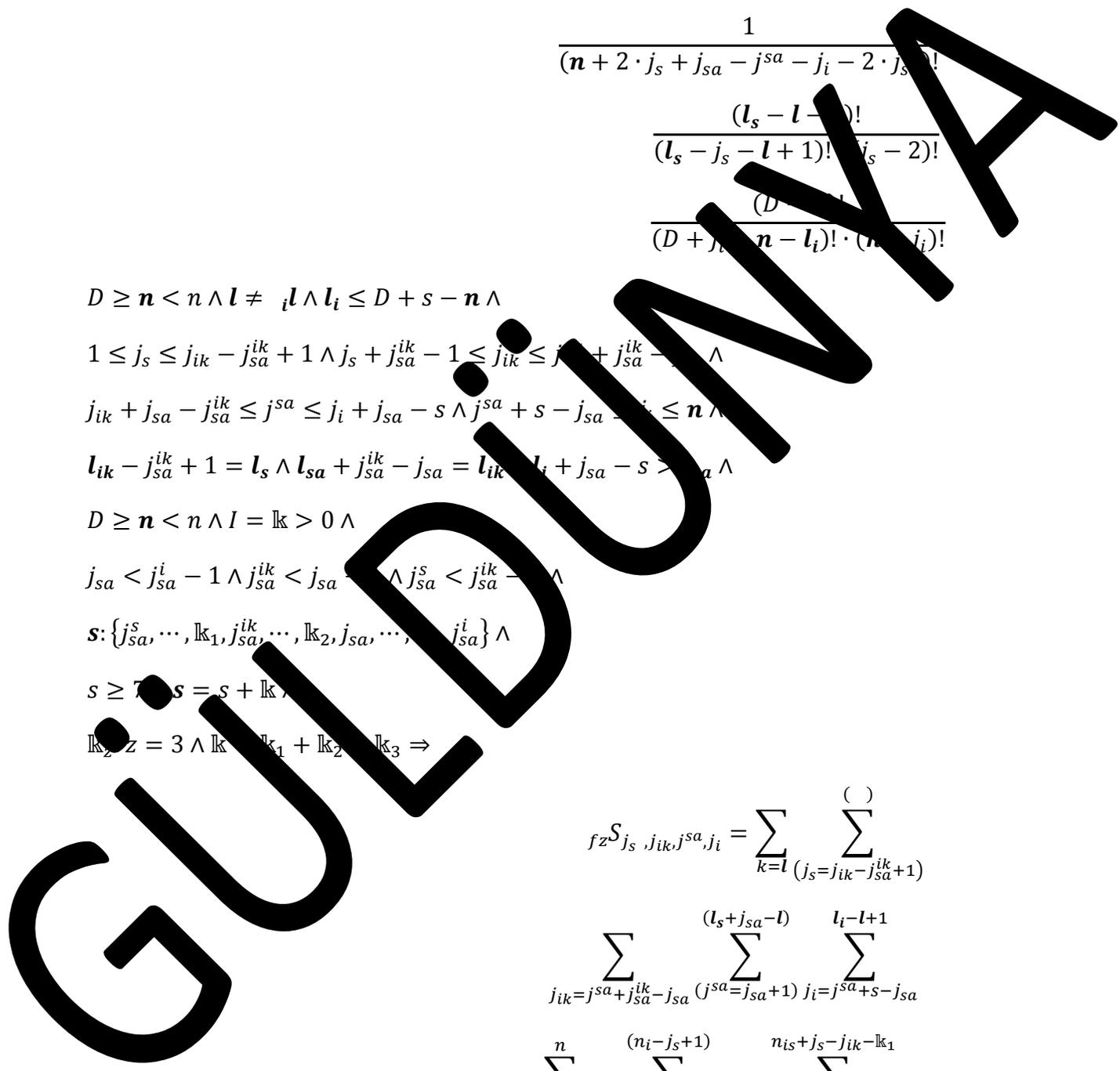
$s \geq 7 \wedge s = s + \mathbb{k}_1$

$\mathbb{k}_2 \cdot z = 3 \wedge \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$fz S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=l}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)} (n_i - j_s + 1) \sum_{(j^{sa}=j_{sa}+1)}^{(l_s+j_{sa}-l)} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$



$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
 & \frac{(n_s + j_i - n - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i + j_i - l_{sa})!}{(j^{sa} + l_i + j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=l}^{(\quad)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)} \\
 & \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(l_s+j_{sa}-l)} \sum_{(j^{sa}=j_{sa}+1)} \sum_{j_i=j^{sa}+s-j_{sa}} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \\
 & \frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!} \cdot \\
 & \frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}
 \end{aligned}$$

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$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq l_i \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

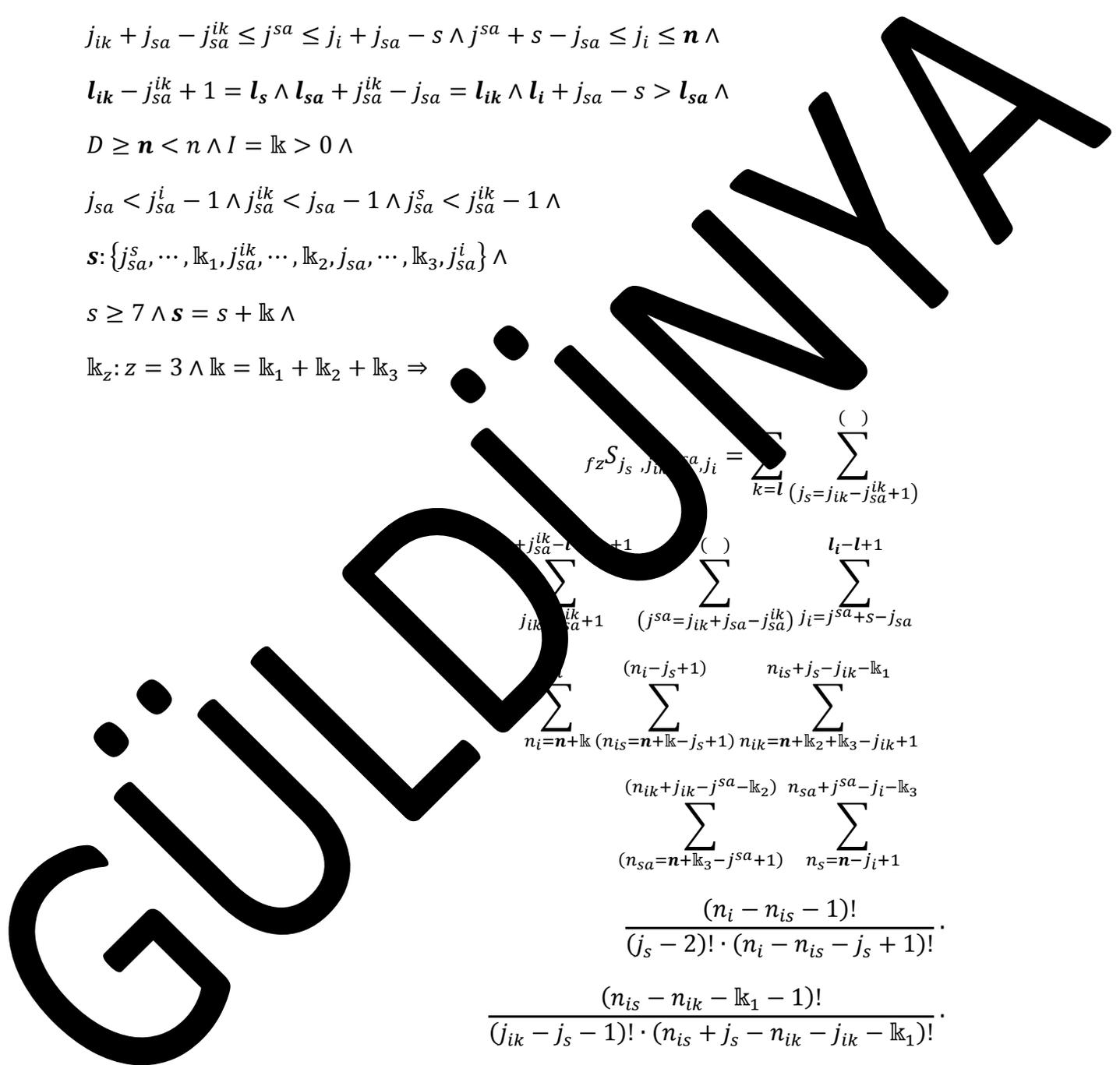
$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$\begin{aligned} f_z S_{j_s, j_{ik}, j_{sa}, j_i} &= \sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)} \\ &\sum_{j_{ik}=k+1}^{j_{sa}^{ik}-l+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\cdot)} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i-l+1} \\ &\sum_{n_i=n+k}^{(n_i-j_s+1)} \sum_{(n_{is}=n+k-j_s+1)}^{n_{is}+j_s-j_{ik}-k_1} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1} \\ &\sum_{(n_{sa}=n+k_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-k_3} \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ &\frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \\ &\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\ &\frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!} \end{aligned}$$



$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{l=1}^{j_s - j_{ik} - j_{sa}^{ik}} \sum_{j_{ik} = j_{sa}^{ik}}^{l_{sa} + j_{sa}^{ik} - l - j_{sa}^{ik}} \sum_{(j^{sa} = j_{sa}^{ik} - j_{sa} - j_{sa}^{ik})} \sum_{j_i = j^{sa} + s - j_{sa}}^{n - j_s + 1} \sum_{k_1=0}^{n - j_s + 1} \sum_{k_2=0}^{n - j_s + 1} \sum_{k_3=0}^{n - j_s + 1} \frac{(n_i + j_{sa}^{ik} + j_{sa}^{ik} - j^{sa} - j_i - k_1 - k_2 - k_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - k_1 - k_2 - k_3)!} \cdot \frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$j_s \leq n - l \wedge l \neq i \wedge l \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{l=1}^{()} \sum_{(j_s=j_{ik}, j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=j_{sa}^{lk}}^{l_{ik}-l+1} \sum_{j_{ik}+j_{sa}-j_s}^{()} \sum_{j_i=j_{sa}+s-j_{sa}}^{()}$$

$$\sum_{n_i=n+\mathbb{k}}^{(n_i-l+1)} \sum_{(n_{ik}+lk-j_s+1)}^{(n_{ik}+lk-1)} \sum_{(n_{sa}+j_{sa}-j_i-lk_1)}^{(n_{sa}+j_{sa}-j_i-lk_1)}$$

$$\sum_{(n_{sa}=\mathbb{k}_3-j_{sa}+1)}^{(n_{ik}-j_{sa}-lk_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j_{sa}-j_i-lk_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(n_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i - \mathbb{k}_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j_{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j_{sa} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

GÜLDÜNYA

$$\sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)}$$

$$\sum_{j_{ik}=j_{sa}^{lk}+1}^{l_{ik}-l+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\cdot)} \sum_{j_i=j^{sa}+s-j_i}^{(\cdot)}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} n_{ik}=n_{is}+j_{ik}-l_{k1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k2})}^{(\cdot)} \sum_{(n_{sa}=n_{sa}+j^{sa}-j_i)}^{(\cdot)}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - l_{k2} - j_i - 2 \cdot j_{sa}^s)!}{(n_i - l_{k1} - l_{k2} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq 1 \wedge l_i \leq D + s - n \wedge$$

$$1 < j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_{ik} + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{ik} \leq j_i + j_{sa} - j_{sa}^{ik} \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{lk} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n - l = l_k >$$

$$j_s - j_{sa}^{ls} - 1 \wedge j_{sa}^{lk} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ls}, j_{sa}^{lk}, \dots, l_{k2}, j_{sa}, \dots, l_{k3}, j_{sa}^l\} \wedge$$

$$s \geq 1 \wedge s = s + l_k \wedge$$

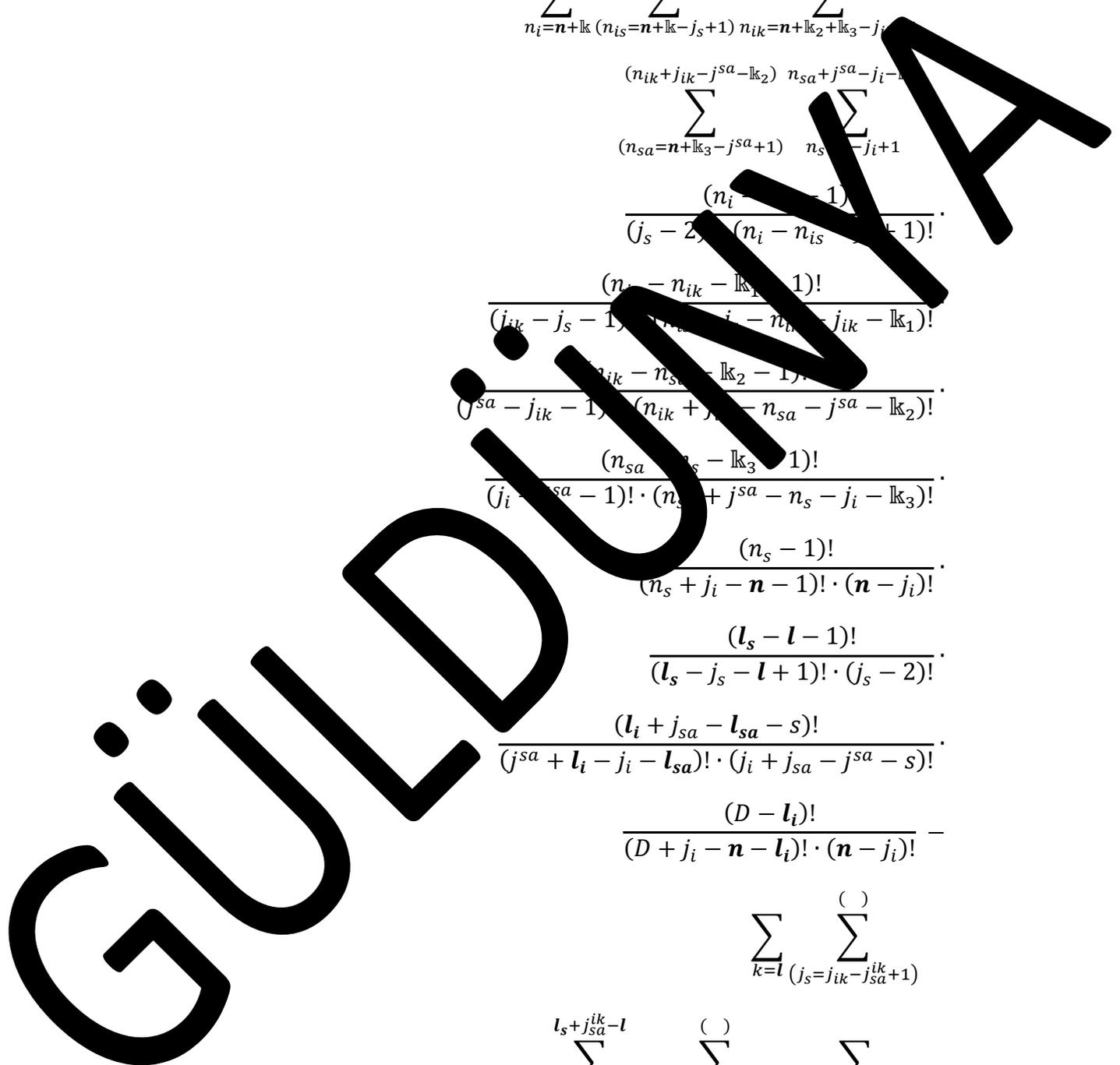
$$l_{kz}: z = 3 \wedge l_k = l_{k1} + l_{k2} + l_{k3} \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)}$$

$$\begin{aligned}
 & \sum_{j_{ik}=j_{sa}^{lk}+1}^{l_s+j_{sa}^{lk}-l} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{lk})} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i-l+1} \\
 & \sum_{n_i=n+lk}^n \sum_{(n_{is}=n+lk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+lk_2+lk_3-j_i}^{n_{is}+j_s-j_{ik}-lk_1} \\
 & \sum_{(n_{sa}=n+lk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-lk_2)} \sum_{n_s=j_i+1}^{n_{sa}+j^{sa}-j_i-l} \\
 & \frac{(n_i-1)!}{(j_s-2)! \cdot (n_i-n_{is}-1)!} \cdot \frac{(n_i-n_{ik}-lk_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_i-n_{ik}-j_{ik}-lk_1)!} \\
 & \frac{(n_{ik}-n_{sa}-lk_2-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-lk_2)!} \cdot \frac{(n_{sa}-lk_3-1)!}{(j_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-lk_3)!} \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \\
 & \frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!} \cdot \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!}
 \end{aligned}$$

$$\sum_{k=l} \sum_{(j_s=j_{ik}-j_{sa}^{lk}+1)}$$

$$\begin{aligned}
 & \sum_{j_{ik}=j_{sa}^{lk}+1}^{l_s+j_{sa}^{lk}-l} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{lk})} \sum_{j_i=j^{sa}+s-j_{sa}} \\
 & \sum_{n_i=n+lk}^n \sum_{(n_{is}=n+lk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-lk_1}
 \end{aligned}$$



$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3} (n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^s)! / (n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!$$

$$\frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_s^s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - 1)!}{(D + j_s - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l \neq i \wedge l_i \leq D + s - n \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa}^{ik} + j_{sa}^{ik} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s \geq j_{sa} \wedge$

$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 7 \wedge s = s + \mathbb{k}_1$

$\mathbb{k}_2 \cdot z = 3 \wedge \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$fz_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_{sa}-l-j_{sa}+2)} \sum_{(j_s=2)}^{()}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{()} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
 & \frac{(n_s + \dots - n - 1)!}{(n_s + \dots - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i + \dots - l_{sa})}{(j^{sa} + l_i + \dots - l_{sa}) \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + \dots - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=l}^{(l_{sa} - l - j_{sa} + 2)} \sum_{(j_s=2)} \\
 & \sum_{j_{ik}=j_s+j_{sa}^{lk}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{lk})} \sum_{j_i=j^{sa}+s-j_{sa}} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \\
 & \frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!} \cdot \\
 & \frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}
 \end{aligned}$$

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$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$f_z S_{j_s, j_{sa}^{ik}, j_{sa}, j_i} = \sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=2)}^{(l_i-l-j_{sa}^{ik}+2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(j_s)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_i-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{(l_i-l+1)}$$

$$\sum_{n_i=n+k}^{(n_i-j_s+1)} \sum_{(n_{is}=n+k-j_s+1)}^{(n_{is}+j_s-j_{ik}-k_1)}$$

$$\sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{(n_{sa}=n+k_3-j^{sa}+1)}^{(n_{sa}+j^{sa}-j_i-k_3)}$$

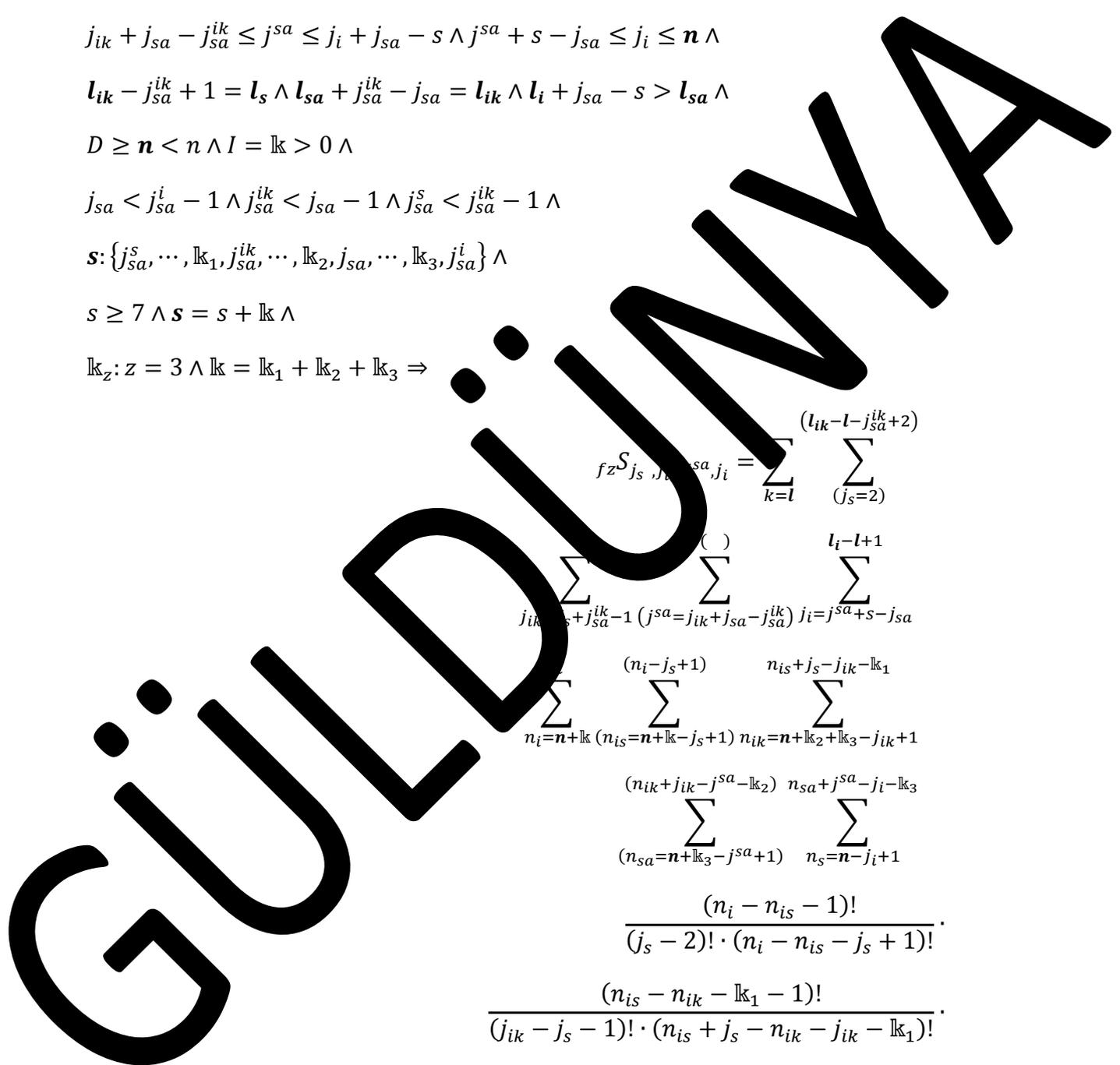
$$\sum_{n_s=n-j_i+1}^{(n_i-n_{is}-1)!}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!}$$

$$\frac{(n_{is}-n_{ik}-k_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-k_1)!}$$

$$\frac{(n_{ik}-n_{sa}-k_2-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-k_2)!}$$

$$\frac{(n_{sa}-n_s-k_3-1)!}{(j_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-k_3)!}$$



$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa})!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{k=l}^{(l_{ik} - j_{sa}^{ik} + 2)} \sum_{(j_s=2)}^{(j_s - j_{sa})} \sum_{j_{ik}=j_s}^{(j_s - j_s + 1)} \sum_{(j^{sa} = j_s + j_{sa} - j_{sa}^{ik})} \sum_{n=n+k}^n \sum_{(n_{is}=n+j_s+1)}^{(n_{is}=n+j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{(n_s=n_{sa}+j^{sa}-j_i-k_3)} \frac{(n_i + j_s + j_{sa} - j^{sa} - j_i - k_1 - k_2 - k_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - k_1 - k_2 - k_3)!} \cdot \frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fz S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{(j_s=2)}^{(l_s-l)} \sum_{(j_i=1)}^{(l_i+1)} \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(j_s+j_{sa}^{ik}-1)} (j_{sa}=j_{ik}-j_{sa}^{ik}) \sum_{j_i=j_{sa}^{ik}-j_{sa}}^{(j_s+j_{sa}^{ik}-j_{sa})} \sum_{n_i=0}^n \frac{(n_i+j_s+1) \binom{n_i+j_s+1}{j_{ik}+1}}{(n_{is}=n_i+j_s+1) \binom{n_i+j_s+1}{j_{ik}+1}} \frac{\binom{n_i+j_s+1}{j_{ik}+1} \binom{n_i+j_s+1}{j_{sa}-j_{ik}-\mathbb{k}_1}}{\binom{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \binom{n_{sa}+j_{sa}-j_i-\mathbb{k}_3}} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}+1)} \sum_{n_s=n-j_i+1} \frac{(n_i-n_{is}-1)!}{(j_{ik}-j_s-1)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!} \cdot \frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j_{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j_{sa}-\mathbb{k}_2)!} \cdot \frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j_{sa}-1)! \cdot (n_{sa}+j_{sa}-n_s-j_i-\mathbb{k}_3)!} \cdot \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \cdot \frac{(l_i+j_{sa}-l_{sa}-s)!}{(j_{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j_{sa}-s)!} \cdot \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!}$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}^{(l_s-l+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{()} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j_{sa}+s-j_{sa}}^{()}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-k_1}^{()}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-1)}^{()} \sum_{(n_s=n_{sa}+j_{sa}-j_{sa}^i)}^{()}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j_{sa}^{ik} - k_1 - k_2 - k_3 - 2 \cdot j_{sa}^i)!}{(n_i - n - k_1 - k_2 - k_3)!}$$

$$\frac{1}{(n + 2 \cdot j_s + j_{sa} - j_{sa}^{ik} - j_i - 2 \cdot j_{sa}^i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq l \wedge l_s \leq D - n - 1 \wedge$$

$$1 \leq j_s \leq j_{ik} + j_{sa}^{ik} + 1 \wedge j_i + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - j_{sa} \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa}^{ik} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n - 1 \leq D + j_i + s - n - 1 \wedge$$

$$D > n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s \in \{ \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i \} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$\begin{aligned}
 f_{zS} S_{j_s, j_{ik}, j^{sa}, j_i} &= \sum_{k=l}^{(\quad)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)} \\
 &\sum_{j_{ik}=j^{sa}+j_{sa}^{lk}-j_{sa}}^{(j_i+j_{sa}-s)} \sum_{(j^{sa}=j_{sa}+1)}^{l_{sa}+s-l-j_{sa}+1} \sum_{j_i=l_i+n-D}^{(\quad)} \\
 &\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 &\frac{(n_{ik}+j_{ik}-j^{sa})! \cdot (n_{sa}+j^{sa}-n_{is}-j_i-l_{k_3})!}{(n_{sa}=n+l_{k_3}-j^{sa}-1)! \cdot (n_s=n-j_i+l_{k_3}-j^{sa}-1)!} \\
 &\frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_{is}+j_s-1)!} \\
 &\frac{(n_{ik}-n_{is}-l_{k_1}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-l_{k_1})!} \\
 &\frac{(n_{ik}-n_{sa}-l_{k_2}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-l_{k_2})!} \\
 &\frac{(n_{sa}-n_s-l_{k_3}-1)!}{(j_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-l_{k_3})!} \\
 &\frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \\
 &\frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \\
 &\frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!} \\
 &\frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \\
 &\sum_{k=l}^{(\quad)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)} \\
 &\sum_{j_{ik}=j^{sa}+j_{sa}^{lk}-j_{sa}}^{(l_{sa}-l+1)} \sum_{(j^{sa}=j_{sa}+1)}^{l_i-l+1} \sum_{j_i=l_{sa}+s-l-j_{sa}+2}^{(\quad)}
 \end{aligned}$$

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$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_s+1) \\ (n_{i_s}=n+l_k-j_s+1)}} \sum_{\substack{n_{i_s}+j_s-j_{ik}-l_{k_1} \\ n_{ik}=n+l_{k_2}+l_{k_3}-j_{ik}+1}} \\
 & \sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-l_{k_2}) \\ (n_{sa}=n+l_{k_3}-j^{sa}+1)}} \sum_{\substack{n_{sa}+j^{sa}-j_i-l_{k_3} \\ n_s=n-j_i+1}} \\
 & \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \\
 & \frac{(n_{i_s} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{i_s} + j_s - j_{ik} - l_{k_1})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{sa} + j^{sa} - n_s - l_{k_3})!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} - l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=l} \sum_{\substack{(\quad) \\ (j_s=j_{ik}-j_{sa}^{ik}+1)}} \\
 & \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{\substack{(\quad) \\ (j^{sa}=j_i+j_{sa}-s)}} \sum_{\substack{l_{sa}+s-l-j_{sa}+1 \\ j_i=l_i+n-D}} \\
 & \sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_s+1) \\ (n_{i_s}=n+l_k-j_s+1)}} \sum_{n_{ik}=n_{i_s}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{\substack{(\quad) \\ (n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}} \sum_{n_s=n_{sa}+j^{sa}-j_i-l_{k_3}}
 \end{aligned}$$

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$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!} \cdot \frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!} \cdot \frac{(D - l)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa}^{ik}$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{ik} - 1 < j_{sa} - 1$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1, 2, 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)} \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(j_i+j_{sa}-s)} \sum_{(j^{sa}=j_{sa}+1)}^{l_{ik}+s-l-j_{sa}^{ik}+1} \sum_{j_i=l_i+n-D}^{n} \sum_{(n_i=j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
 & \frac{(n_s + \dots - n - 1)!}{(n_s + \dots - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(n_s - l - 1)!}{(n_s - l - 1)! \cdot (j_s - l - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i + \dots - l_{sa})}{(j^{sa} + l_i + \dots - l_{sa}) \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + \dots - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{(\quad)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)} \\
 & \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(l_{ik}+j_{sa}-l-j_{sa}^{ik}+1)} \sum_{(j^{sa}=j_{sa}+1)}^{l_i-l+1} \sum_{j_i=l_{ik}+s-l-j_{sa}^{ik}+2} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
 \end{aligned}$$

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$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \frac{(l_i)!}{(D + j_i - n - l_i)! \cdot (j_i)!} \cdot \sum_{j_s = j_i + j_{sa} - s}^{(j_s)} \sum_{j_{sa} = j^{sa} + 1}^{(j_s)} \sum_{j_{ik} = l_i + n - D}^{l_{ik} + s - l - j_{sa}^{ik} + 1} \sum_{j_{sa} = j^{sa} + j_{sa}^{ik} - j_{sa}}^{(n_i - j_s - 1)} \sum_{j_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}^{(n_i - j_s - 1)} \sum_{j_{sa} = n_{sa} + j_{sa}^{ik} - j_{sa}}^{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{j_{sa} = n_{sa} + j^{sa} - j_i - \mathbb{k}_3}^{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^s)!} \frac{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!} \cdot \frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$\begin{aligned}
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{()} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + \dots)}^{()} \\
 & \sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}}^{(l_s + j_{sa} - l)} \sum_{(j^{sa} = j_{sa}^{ik} - l_s - l + 1)}^{-l+1} \\
 & \sum_{n_i = n + k}^n \sum_{(n_i - j_s + 1)}^{(n_i + j_s - j_{ik} - \dots)} \sum_{(n_{ik} = n_i + k_3 - j_{ik} + 1)}^{n_{is} + j_s - j_{ik} - \dots} \\
 & \sum_{(n_{ik} + j_{sa} - k_2)}^{(n_{ik} + j_{sa} - k_2)} \sum_{(j_i - k_3)}^{j_i - k_3} \\
 & \sum_{(n_s = n + k_3 - j^{sa} - 1)}^{(n_s = n + k_3 - j^{sa} - 1)} \sum_{n_s = n - j_i + 1} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \\
 & \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \\
 & \frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -
 \end{aligned}$$

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$$\sum_{k=l}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()} \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{()} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{()} \sum_{j_i=l_i+n}^{l_s+s-l} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-k_1}^{()} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{n_{sa}=n_{sa}+j^{sa}-j_i}^{()} \frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - k_2 - k_3 - 2 \cdot j_{sa}^s)!}{(n_i + n - k_1 - k_2 - k_3 - 2 \cdot j_{sa}^s)!} \cdot \frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l \neq 1 \wedge l_s \leq D - n - 1 \wedge$

$1 < j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_i + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_i \leq j_i + j_{sa} - j_{sa} \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa}^{ik} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$

$D + s - n - 1 \leq D + j_i + s - n - 1 \wedge$

$D > n < n \wedge I = k > 0 \wedge$

$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$

$s \cdot \{j_{sa}^{ik}, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 7 \wedge s = s + k \wedge$

$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$

$$\begin{aligned}
 f_z S_{j_s, j_{ik}, j_{sa}, j_i} &= \sum_{k=l}^{(\quad)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)} \\
 &\sum_{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}^{(l_i+n+j_{sa}-D-s-1)} \sum_{(j_{sa}=j_{sa}+1)}^{l_i-l+1} \sum_{j_i=l_i+n}^{(\quad)} \\
 &\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 &\sum_{(n_{sa}=n+l_{k_3}-j_{sa}+1)}^{(n_{ik}+j_{ik}-j_{sa}+j_{sa}^{ik}-j_i-l_{k_3})} \sum_{n_s=n-j_i+l_{k_2}}^{(\quad)} \\
 &\frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_{is}+j_s-1)!} \\
 &\frac{(n_{ik}-n_{is}-l_{k_1}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-1)!} \\
 &\frac{(n_{ik}-n_{sa}-l_{k_2}-1)!}{(j_{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j_{sa}-l_{k_2})!} \\
 &\frac{(n_{sa}-n_s-l_{k_3}-1)!}{(j_i-j_{sa}-1)! \cdot (n_{sa}+j_{sa}-n_s-j_i-l_{k_3})!} \\
 &\frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \\
 &\frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \\
 &\frac{(l_i+j_{sa}-l_{sa}-s)!}{(j_{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j_{sa}-s)!} \\
 &\frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \\
 &\sum_{k=l}^{(\quad)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)} \\
 &\sum_{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}^{(l_{sa}-l+1)} \sum_{(j_{sa}=l_i+n+j_{sa}-D-s)}^{l_i-l+1} \sum_{j_i=j_{sa}+s-j_{sa}}^{(\quad)}
 \end{aligned}$$

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$$\sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_s+1) \\ (n_{i_s}=n+l_k-j_s+1)}} \sum_{\substack{n_{i_s}+j_s-j_{ik}-l_{k_1} \\ n_{ik}=n+l_{k_2}+l_{k_3}-j_{ik}+1}} \\ \sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-l_{k_2}) \\ (n_{sa}=n+l_{k_3}-j^{sa}+1)}} \sum_{\substack{n_{sa}+j^{sa}-j_i-l_{k_3} \\ n_s=n-j_i+1}} \\ \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \\ \frac{(n_{i_s} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{i_s} + j_s - j_{ik} - l_{k_1})!} \cdot \\ \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\ \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - l_{k_3})!} \cdot \\ \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\ \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\ \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} - l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\ \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

$$\sum_{k=l} \sum_{\binom{()}{j_s=j_{ik}-j_{sa}^{ik}+1}}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{\substack{(l_{sa}-l+1) \\ (j^{sa}=l_i+n+j_{sa}-D-s)}} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_s+1) \\ (n_{i_s}=n+l_k-j_s+1)}} \sum_{n_{ik}=n_{i_s}+j_s-j_{ik}-l_{k_1}}$$

$$\sum_{\binom{()}{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}} \sum_{n_s=n_{sa}+j^{sa}-j_i-l_{k_3}}$$

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$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^i)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!} \cdot \frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^i)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!} \cdot \frac{(D - l)!}{(D + j_i - n - l_i)! (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa}^{ik}$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{ik} - 1 < j_{sa} - 1$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_2: z \geq 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)} \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(l_i+n+j_{sa}-D-s-1)} \sum_{(j^{sa}=j_{sa}+1)}^{l_i-l+1} \sum_{j_i=l_i+n-D}^{n} \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
 & \frac{(n_s + n - n - 1)!}{(n_s + n - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(n - l - 1)!}{(n - l - 1)! \cdot (j_s - l - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i + n - l_{sa} - 1)!}{(j^{sa} + l_i - l_{sa} - 1)! \cdot (j_i + j^{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{(\quad)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)} \\
 & \sum_{j_{ik}=j^{sa}+j_{sa}^{lk}-j_{sa}}^{(l_{ik}+j_{sa}-l-j_{sa}^{lk}+1)} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)}^{l_i-l+1} \sum_{j_i=j^{sa}+s-j_{sa}} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
 \end{aligned}$$

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$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \frac{(l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{j_{ik} = j^{sa} + j_{sa} - j_s}^{(l_{ik} + j_{sa} - j_{sa}^{ik} + 1)} \sum_{j_s = j^{sa} + s - j_{sa}}^{(j_s - j_{sa}^{ik} + 1)} \sum_{n_{is} = n + \mathbb{k} - j_s + 1}^{(n_{is} - n + \mathbb{k} - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}^{(n_{ik} - n_{is} + j_s - j_{ik} - \mathbb{k}_1)} \sum_{n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}^{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = n_{sa} + j^{sa} - j_i - \mathbb{k}_3}^{(n_s = n_{sa} + j^{sa} - j_i - \mathbb{k}_3)} \frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!} \cdot \frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=l}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+...)}^{()} \sum_{j_{ik}=j^{sa}+j_{sa}^{lk}-j_{sa}}^{(l_s+j_{sa}-l)} \sum_{(j^{sa}=l_i+n+j_{sa}-l)}^{(l+1)} \sum_{n_i=n+l_k}^n \sum_{(n_i-j_s+1)}^{(n_{is}+j_s-j_{ik}-...)} \sum_{(n_{ik}=n+l_k+lk_3-j_{ik}+1)}^{(n_{is}+j_s-j_{ik}-...)} \sum_{(n_{ik}+...-j^{sa}-lk_2)}^{(n_{ik}+...-j^{sa}-lk_2)} \sum_{(n_s=n-j_i+1)}^{(n_s=n-j_i+1)} \frac{(n_i - n_{is} - 1)!}{(j_s - ...)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - lk_1 - 1)!}{(j_{ik} - ... - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - lk_1)!} \cdot \frac{(n_{ik} - n_{sa} - lk_2 - 1)!}{(j_{ik} - ... - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - lk_2)!} \cdot \frac{(n_{sa} - n_s - lk_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - lk_3)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

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$$\sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)}$$

$$\sum_{j_{ik}=j_{sa}+j_{sa}^{lk}-j_{sa}}^{(l_s+j_{sa}-l)} \sum_{(j_{sa}=l_i+n+j_{sa}-D-s)}^{(l_s+j_{sa}-l)} \sum_{j_i=j_{sa}+s-j_{sa}^{ik}}^{(l_s+j_{sa}-l)}$$

$$\sum_{n_i=n+lk}^n \sum_{(n_{is}=n+lk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-lk_1}^{(n_i-j_s+1)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-lk_2)}^{(\cdot)} \sum_{(n_{sa}=n_{sa}+j_{sa}-j_i)}^{(\cdot)}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j_{sa}^{ik} - lk_2 - j_{sa} - 2 \cdot j_{sa}^s)!}{(n_i + n - lk_1 - lk_2 - j_{sa} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{1}{(n + 2 \cdot j_s + j_{sa} - j_{sa}^{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq 1 \wedge l_s \leq D - n - 1 \wedge$$

$$1 < j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_i + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_i \leq j_i + j_{sa} - j_{sa}^{ik} \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n - 1 \leq D + j_i + s - n - 1 \wedge$$

$$D > n < n \wedge I = lk > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s \cdot \{j_{sa}^{ik}, lk_1, j_{sa}^{ik}, \dots, lk_2, j_{sa}, \dots, lk_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + lk \wedge$$

$$lk_z: z = 3 \wedge lk = lk_1 + lk_2 + lk_3 \Rightarrow$$

$$\begin{aligned}
 f_z S_{j_s, j_{ik}, j^{sa}, j_i} &= \sum_{k=l}^{(\quad)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)} \\
 &\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_i+n+j_{sa}^{lk}-D-s-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\quad)} \sum_{j_i=l_i+n}^{l_i-l+1} \\
 &\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_{is}+j_s-j_{ik}-k_1)} \\
 &\frac{(n_{ik}+j_{ik}-j^{sa}-k_2-j_i-k_3)!}{(n_{sa}=n+k_3-j_{sa}^{ik}+1)! \cdot (n_s=n-j_i+1)!} \cdot \frac{(n_s-n_{is}-1)!}{(j_s-2)! \cdot (n_{is}+1)!} \\
 &\frac{(n_{ik}-k_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-j_{ik}-k_1)!} \\
 &\frac{(n_{ik}-n_{sa}-k_2-1)!}{(j_{ik}-j_{sa}^{ik}-1)! \cdot (n_{ik}-j_{ik}-n_{sa}-j^{sa}-k_2)!} \\
 &\frac{(n_{sa}-n_s-k_3-1)!}{(j_i-j_{sa}^{ik}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-k_3)!} \\
 &\frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \\
 &\frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \\
 &\frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!} \\
 &\frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \\
 &\sum_{k=l}^{(\quad)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)} \\
 &\sum_{j_{ik}=l_i+n+j_{sa}^{lk}-D-s}^{l_{sa}+j_{sa}^{lk}-l-j_{sa}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\quad)} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i-l+1}
 \end{aligned}$$

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$$\sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_s+1) \\ (n_{i_s}=n+l_k-j_s+1)}} \sum_{\substack{n_{i_s}+j_s-j_{ik}-l_{k_1} \\ n_{ik}=n+l_{k_2}+l_{k_3}-j_{ik}+1}} \sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-l_{k_2}) \\ (n_{sa}=n+l_{k_3}-j^{sa}+1)}} \sum_{\substack{n_{sa}+j^{sa}-j_i-l_{k_3} \\ n_s=n-j_i+1}} \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \frac{(n_{i_s} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{i_s} + j_s - j_{ik} - l_{k_1})!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - l_{k_3})!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} - l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l} \sum_{\binom{()}{j_s=j_{ik}-j_{sa}^{ik}+1}}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_{sa}+j_{sa}^{ik}-l-j_{sa}+1} \sum_{\binom{()}{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_s+1) \\ (n_{i_s}=n+l_k-j_s+1)}} \sum_{n_{ik}=n_{i_s}+j_s-j_{ik}-l_{k_1}}$$

$$\sum_{\binom{()}{n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2}}} \sum_{n_s=n_{sa}+j^{sa}-j_i-l_{k_3}}$$

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$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!} \cdot \frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!} \cdot \frac{(D - l)!}{(D + j_i - n - l_i)! (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa}^{sa}$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{ik} - 1 < j_{sa} - 1$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_i+n+j_{sa}^{ik}-D-s-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=l_i+n-D}^{l_i-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
 & \frac{(n_s + \dots - n - 1)!}{(n_s + \dots - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(n_s - l - 1)!}{(n_s - l - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i + \dots - l_{sa})}{(j^{sa} + l_i + \dots - l_{sa}) \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()} \\
 & \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_i} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i-l+1} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{(n_s=n-j_i+1)}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
 \end{aligned}$$

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$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!} \cdot \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \frac{(l_i)!}{(D + j_i - n - l_i)! \cdot (j_i)!} \cdot \sum_{j_{ik} = n + j_{sa}^{lk} - D - s}^{l_{ik} - l + 1} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{lk}}^{(j_s - j_{sa}^{lk} + 1)} \sum_{j_i = j^{sa} + s - j_{sa}}^{(n_i - j_i - 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}^{(n_{is} = n + \mathbb{k} - j_s + 1)} \sum_{n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}^{(n_{sa} = n_{sa} + j^{sa} - j_i - \mathbb{k}_3)} \frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!} \cdot \frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fz \mathcal{D}_{j_s, j_{ik}, j_{sa}, j_i} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)} \sum_{l_i = l + 1}^{n + j_{sa}^{ik} - D - s} \sum_{j_{ik} = j_{sa}^{ik} + 1}^{n} \sum_{(j_{sa} = j_{sa}^{ik} - j_{sa}^{ik})} \sum_{j_i = l_i + n - D}^{n} \sum_{(n_i = n - 1)}^{(n_i - 1)} \sum_{n_{is} = n + \mathbb{k}_1 - j_{ik} - \mathbb{k}_1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{n_i = n}^{(n_{is} = n + \mathbb{k}_1 - j_{ik} - \mathbb{k}_1)} \sum_{n_{ik} = n + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1}^{n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2} \sum_{(n_{sa} = n + \mathbb{k}_3 - j_{sa} + 1)}^{n_{sa} + j_{sa} - j_i - \mathbb{k}_3} \sum_{(n_s = n - j_i + 1)}^{(n_i - n_{is} - 1)!} \cdot \frac{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{lk}-D-s}^{l_s+j_{sa}^{lk}-l} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\cdot)} \sum_{j_i=j^{sa}+s-}^{(\cdot)}$$

$$\sum_{n_i=n+lk}^n \sum_{(n_{is}=n+lk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{ik}-lk_1}^{(\cdot)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-lk_2)}^{(\cdot)} \sum_{(n_{sa}+j^{sa}-j_i)}^{(\cdot)}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - lk_2 - \dots - 2 \cdot j_{sa}^s)!}{(n_i - lk_1 - lk_2 - \dots)}$$

$$\frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq 1 \wedge l_s \leq D - n - 1 \wedge$$

$$1 < j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_{sa}^{lk} + j_{sa}^{lk} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_i \leq j_i + j_{sa} \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{lk} + 1 = l_s \wedge l_{sa}^{lk} - j_{sa}^{lk} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < \dots \leq D + j_s + s - n - 1 \wedge$$

$$D > n \wedge I = lk > 0 \wedge$$

$$j_{sa} < j_{sa}^i \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}, \dots, lk_1, j_{sa}^{ik}, \dots, lk_2, j_{sa}, \dots, lk_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + lk \wedge$$

$$lk_z: z = 3 \wedge lk = lk_1 + lk_2 + lk_3 \Rightarrow$$

$$\begin{aligned}
 f_{zS}^{j_s, j_{ik}, j^{sa}, j_i} &= \sum_{k=l}^{(l_i+n-D-s)} \sum_{(j_s=2)}^{(l_i+n-D-s)} \\
 &\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{()} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=l_i+n-D}^{l_i-l+1} \\
 &\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \\
 &\frac{(n_{ik}+j_{ik}-j^{sa})! \cdot (n_{sa}+j^{sa}-j_i-k_3)!}{(n_{sa}=n+k_3-j_{ik}+1)! \cdot (n_s=n-j_i)!} \\
 &\frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_{is}+j_s+1)!} \\
 &\frac{(n_{is}-n_{ik}-k_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-k_1)!} \\
 &\frac{(n_{ik}-n_{sa}-k_2-1)!}{(n_{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-k_2)!} \\
 &\frac{(n_{sa}-n_s-k_3-1)!}{(j_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-k_3)!} \\
 &\frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \\
 &\frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \\
 &\frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!} \\
 &\frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \\
 &\sum_{k=l}^{(l_{sa}-l-j_{sa}+2)} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{sa}-l-j_{sa}+2)} \\
 &\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{()} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i-l+1}
 \end{aligned}$$

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$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{i_k}=n+l_{k_2}+l_{k_3}-j_{i_k}+1}^{n_{i_s}+j_s-j_{i_k}-l_{k_1}} \\
 & \sum_{(n_{s_a}=n+l_{k_3}-j^{s_a}+1)}^{(n_{i_k}+j_{i_k}-j^{s_a}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{s_a}+j^{s_a}-j_i-l_{k_3}} \\
 & \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \\
 & \frac{(n_{i_s} - n_{i_k} - l_{k_1} - 1)!}{(j_{i_k} - j_s - 1)! \cdot (n_{i_s} + j_s - j_{i_k} - l_{k_1})!} \cdot \\
 & \frac{(n_{i_k} - n_{s_a} - 1)!}{(j^{s_a} - j_{i_k} - 1)! \cdot (n_{i_k} + j_{i_k} - n_{s_a} - j^{s_a} - l_{k_2})!} \cdot \\
 & \frac{(n_{s_a} - n_s - 1)!}{(j_i - j^{s_a} - 1)! \cdot (n_{i_s} + j^{s_a} - n_s - l_{k_3})!} \cdot \\
 & \frac{(n_s - 1)!}{(n_i + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_i - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i + j_{s_a} - l_{s_a} - s)!}{(j^{s_a} - l_i - j_i - l_{s_a})! \cdot (j_i + j_{s_a} - j^{s_a} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=l}^{(l_{s_a}-l-j_{s_a}+2)} \sum_{(j_s=l_i+n-D-s+1)}
 \end{aligned}$$

$$\sum_{j_{i_k}=j_s+j_{s_a}^{l_k}-1}^{()} \sum_{(j^{s_a}=j_{i_k}+j_{s_a}-j_{s_a}^{l_k})}^{()} \sum_{j_i=j^{s_a}+s-j_{s_a}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{i_k}=n_{i_s}+j_s-j_{i_k}-l_{k_1}}$$

$$\sum_{(n_{s_a}=n_{i_k}+j_{i_k}-j^{s_a}-l_{k_2})}^{()} \sum_{n_s=n_{s_a}+j^{s_a}-j_i-l_{k_3}}$$

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$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!} \cdot \frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!} \cdot \frac{(D - l)!}{(D + j_i - n - l_i) \cdot (n - j_i)}$$

$$D \geq n < n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa}^{sa}$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s \wedge l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^l - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^l, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1, 2, 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_i+n-D-s)} \sum_{(j_s=2)} \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{(j_i=l_i+n-D)}^{(l_i-l+1)} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\begin{aligned}
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l - 1)!}{(l_s - j_i - l + 1)! \cdot (l - 2)!} \cdot \\
 & \frac{(l_i + j_{sa} - l_s - s)!}{(j^{sa} + l_i - l_s - s)! \cdot (j_i + l_s - j^{sa} - s)!} \cdot \\
 & \frac{(D - j_i - n + l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{(l_{ik} - l - j_{sa}^{ik} + 2)} \sum_{(j_s = l_i + n - D - s + 1)}^{(l_i - l + 1)} \\
 & \sum_{j_{ik} = j_s + j_{sa}^{ik} - 1}^{(n)} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}^{(j_s - j_{sa}^{ik} - 1)} \sum_{j_i = j^{sa} + s - j_{sa}}^{(l_i - l + 1)} \\
 & \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \\
 & \sum_{(n_{sa} = n + \mathbb{k}_3 - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = n - j_i + 1}^{n_{sa} + j^{sa} - j_i - \mathbb{k}_3} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot
 \end{aligned}$$

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$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa})!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{j_{ik}=j_s}^{l_{ik}-l_{sa}+2} \sum_{j_{sa}=j_i-j_{sa}}^{j_{sa}+j_{sa}-j_{sa}} \sum_{n_{is}=n+l_{sa}-j_{sa}+1}^n \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k1}}^{n_{is}+j_s+1} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k2}}^{n_{sa}+j^{sa}-j_i-l_{k3}} \frac{(n_i + j_s + j_{sa} - j^{sa} - j_i - l_{k1} - l_{k2} - l_{k3} - 2 \cdot j_{sa}^s)!}{(n_i - n - l_{k1} - l_{k2} - l_{k3})!} \cdot \frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

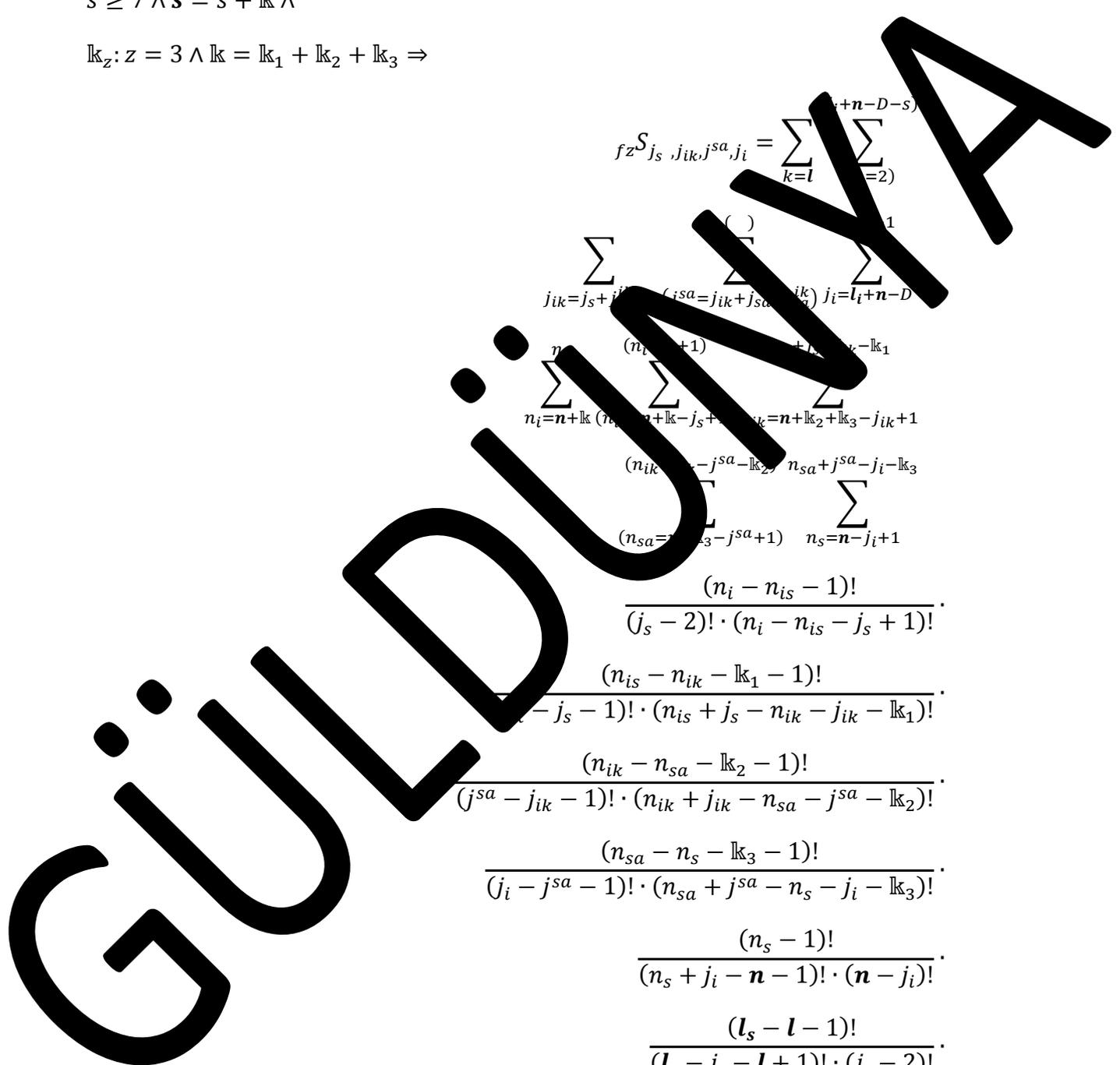
$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 7 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$fz^{S_{j_s, j_{ik}, j_{sa}, j_i}} = \sum_{k=l}^{i+n-D-s} \sum_{i=2}^{i+n-D-s} \sum_{j_{ik}=j_s+j_{sa}^{ik}}^{(j_{sa}=j_{ik}+j_{sa}^{ik})} \sum_{j_i=l_i+n-D}^{(j_i=l_i+n-D)} \sum_{n_i=n+\mathbb{k}}^{(n_i=n+\mathbb{k}+1)} \sum_{n_{ik}=n+\mathbb{k}-j_s}^{(n_{ik}=n+\mathbb{k}-j_s+\mathbb{k}_1)} \sum_{n_{sa}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{(n_{sa}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1)} \sum_{n_s=n-j_i+1}^{(n_s=n-j_i+1)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$



$$\begin{aligned}
 & \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_i+n-D-s+1)} \\
 & \sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+s-j_{sa}} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \\
 & \frac{(n_{ik}+j_{ik}-j^{sa})! \cdot (n_{sa}+j_{sa}-j_i-k_3)!}{(n_{sa}=n+k_3-j_{sa}+1)! \cdot (n_s=n-j_i)!} \\
 & \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_{is}+j_s+1)!} \\
 & \frac{(n_{is}-n_{ik}-k_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-k_1)!} \\
 & \frac{(n_{ik}-n_{sa}-k_2-1)!}{(n_{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-k_2)!} \\
 & \frac{(n_{sa}-n_s-k_3-1)!}{(j_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-k_3)!} \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \\
 & \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \\
 & \frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!} \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} \\
 & \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_i+n-D-s+1)} \\
 & \sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+s-j_{sa}}
 \end{aligned}$$

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$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3} \frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - k_1 - k_2 - k_3 - 2 \cdot j_s)!}{(n_i - n - k_1 - k_2 - k_3)!} \cdot \frac{1}{(n + 2 \cdot j_s + j_{sa} - j_i - 2 \cdot j_s^s)!} \cdot \frac{(l_i - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!} \cdot \frac{(D - l)!}{(D - j_i - n - l + 1)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$

$D + l_s + s - n - l_i + 1 \leq l \leq i \wedge l - 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} + j_{sa}^{ik} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + j_{sa} - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_{sa} + j_{sa} - s > l_{sa} \wedge$

$D + s - n < l_i \leq D - l_s + s - n - 1$

$D \geq n < n \wedge l_i > 0$

$j_{sa} < j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa} < j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \dots, k_1, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 7 \wedge s = s + 1$

$k_z: z = 3 \wedge k_z = k_1 + k_2 + k_3 \Rightarrow$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(l_{sa}-l+1)} \sum_{j_i=l_i+n-D}^{l_i-l+1}$$

$$\begin{aligned}
 & \sum_{n_i = n + k}^n \sum_{(n_{i_s} = n + k - j_s + 1)}^{(n_i - j_s + 1)} \sum_{(n_{i_k} = n + k_2 + k_3 - j_{ik} + 1)}^{n_{i_s} + j_s - j_{ik} - k_1} \\
 & \sum_{(n_{s_a} = n + k_3 - j^{s_a} + 1)}^{(n_{i_k} + j_{i_k} - j^{s_a} - k_2)} \sum_{n_s = n - j_i + 1}^{n_{s_a} + j^{s_a} - j_i - k_3} \\
 & \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \\
 & \frac{(n_{i_s} - n_{i_k} - k_1 - 1)!}{(j_{i_k} - j_s - 1)! \cdot (n_{i_s} + j_s - j_{i_k} - k_1)!} \cdot \\
 & \frac{(n_{i_k} - n_{s_a} - 1)!}{(j^{s_a} - j_{i_k} - 1)! \cdot (n_{i_k} + j_{i_k} - n_{s_a} - j^{s_a} - k_2)!} \cdot \\
 & \frac{(n_{s_a} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{i_s} + j^{s_a} - n_s - k_3)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_i + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_i - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i + j_{s_a} - l_{s_a} - s)!}{(j^{s_a} - l_i - j_i - l_{s_a})! \cdot (j_i + j_{s_a} - j^{s_a} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=l} \sum_{(j_s = j_{i_k} - j_{s_a}^{i_k} + 1)}^{()} \\
 & \sum_{j_{i_k} = j^{s_a} + j_{s_a}^{i_k} - j_{s_a}}^{()} \sum_{(j^{s_a} = j_i + j_{s_a} - s)}^{()} \sum_{j_i = l_i + n - D}^{l_{s_a} + s - l - j_{s_a} + 1} \\
 & \sum_{n_i = n + k}^n \sum_{(n_{i_s} = n + k - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{i_k} = n_{i_s} + j_s - j_{i_k} - k_1} \\
 & \sum_{(n_{s_a} = n_{i_k} + j_{i_k} - j^{s_a} - k_2)}^{()} \sum_{n_s = n_{s_a} + j^{s_a} - j_i - k_3}^{()}
 \end{aligned}$$

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$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}$$

$$\frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!}$$

$$\frac{(D - l)!}{(D + j_i - n - l_i)! (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$D + l_s + s - n - l_i + 1 \leq l \leq i \wedge l - 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i - n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} \wedge j_{sa}^s < j_{sa}^{ik} \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k}$$

$$\mathbb{k}_2 = 3 \wedge \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=l} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j_{sa}=j_{sa}+1)}^{(l_{ik}+j_{sa}-l-j_{sa}^{ik}+1)} \sum_{j_i=l_i+n-D}^{l_i-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j_{sa}+1)}^{(n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j_{sa}-j_i-\mathbb{k}_3}$$

$$\begin{aligned}
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
& \frac{(n_s + j^{sa} - n - 1)!}{(j_s - l - 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_i + j^{sa} - l - 1)!}{(j^{sa} + l_i - j_i - l_{sa} - 1)! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
& \frac{(D - l_i)!}{(D + j^{sa} - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{k=l}^{(\quad)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)} \\
& \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\quad)} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\quad)} \sum_{j_i=l_i+n-D}^{l_{ik}+s-l-j_{sa}^{ik}+1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \\
& \frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!} \cdot \\
& \frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}
\end{aligned}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$D + l_s + s - n - l_i + 1 \leq l \leq i - 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f^{z^s} j_s j_{ik} j_{sa} j_i = \sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(l_s+j_{sa}-l)} \sum_{(j^{sa}=j_{sa}+1)}^{l_i-l+1} \sum_{j_i=l_i+n-D}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$\begin{aligned}
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{sa}+j_{sa}^{ik}-j_{sa}+1} \sum_{j_i=l_i+n-D}^{l_i-l+1} \sum_{n+\mathbb{k}}^{(n_i-j_s)} \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{n_s=n-j_i+1}^{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}
 \end{aligned}$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l}^{(\cdot)} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + \dots)}$$

$$\sum_{j_{ik} = l_i + n + j_{sa}^{ik} - D - s}^{l_{sa} + j_{sa}^{ik} - l - j_{sa} + 1} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa})} \dots$$

$$\sum_{n_i = n + k}^n \sum_{(n_i - j_s + 1)} \dots \sum_{n_{ik} = \dots + j_s - j_{ik} - k_1}$$

$$\sum_{(n_{sa} = n_{ik} + \dots - j^{sa} - k_2)} \dots \sum_{n_{sa} + j^{sa} - j_i - k_3}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - k_2 - k_3 - 2 \cdot j_{sa}^s)!}{(n_i + n - k_1 - k_2 - k_3)!}$$

$$\frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n \wedge l \neq i \wedge l \leq D - n + 1 \wedge$$

$$D + l + s - n - 1 \leq l \leq i - 1 \wedge$$

$$1 - j_s \leq j_s - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=l}^{(l_{sa}-l-j_{sa}+2)} \sum_{(j_s=2)}^{(l_s-l-j_{sa}+2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(j_s)} \sum_{(j_{sa}=j_{ik})}^{(l_i-l+1)} \sum_{j_i=n-D}^{(l_i-l+1)}$$

$$\sum_{n_i=n+k}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{is}=n_{is}-j_{ik}}^{(n_{is}+j_s-j_{ik})}$$

$$\sum_{(n_{ik}=n_{ik}+k_2+k_3-j_{ik}+1)}^{(n_{ik}+k_2+k_3-j_{ik}+1)} \sum_{(n_{ik}-j_{sa}-k_2)}^{(n_{ik}-j_{sa}-k_2)}$$

$$\sum_{(n_s=n+k_3-j_i+1)}^{(n_s=n+k_3-j_i+1)} \sum_{n_s=n-j_i+1}^{(n_s=n-j_i+1)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(n_{sa} - k_1 - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!}$$

$$\frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i - k_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j_{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j_{sa} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l}^{(l_{sa}-l-j_{sa}+2)} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{sa}-l-j_{sa}+2)}$$

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$$\sum_{j_{ik}=j_s+j_{sa}^{lk}-1} \sum_{\binom{()}{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{lk}}} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+lk}^n \sum_{\binom{()}{n_i-j_s+1}} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{\binom{()}{n_{sa}=n_{ik}+j_{ik}-j^{sa}-lk_2}} \sum_{n_s=n_{sa}+j_s-j_i-lk_3}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - lk_1 - lk_2 - lk_3 - j_{sa}^s)!}{(n_i - n - lk_1 - lk_2 - lk_3)!}$$

$$\frac{(n + j_s - j^{sa} - j_i - 2 \cdot j_{sa}^s)!}{(l_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l \neq i \wedge l_s \leq n + 1$
 $D + l_s + s - n - l_i + 1 \leq l - 1 \wedge$
 $1 \leq j_s \leq j_{ik} - j_{sa}^{lk} + 1 \wedge j_s + j_{sa}^{lk} \leq j_{ik} \leq j^{sa} + j_{sa}^{lk} - j_{sa} \wedge$
 $j_{ik} + j_{sa} - j_{sa}^{lk} \leq j^{sa} + j_{sa} - s \wedge j^{sa} - j_{sa} \leq j_i \leq n \wedge$
 $l_{ik} - j_{sa}^{lk} + 1 = l_{sa} + j_s - j_i \wedge l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$
 $D + s - n < l_i \leq D + s - n - 1 \wedge$
 $D \geq n < n - l = lk > 1 \wedge$
 $j_{sa}^{lk} - 1 \wedge j_{sa}^{lk} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{lk} - 1 \wedge$
 $s: \{j_{sa}^s, \dots, j_{sa}^{lk}, \dots, lk_2, j_{sa}, \dots, lk_3, j_{sa}^i\} \wedge$
 $j_{sa}^s = s + lk \wedge$
 $lk_z: z = 3 \wedge lk = lk_1 + lk_2 + lk_3 \Rightarrow$

$$fz^S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l} \sum_{\binom{()}{j_s=2}} \binom{l_{ik}-l-j_{sa}^{lk}+2}$$

$$\begin{aligned}
 & \sum_{j_{ik}=j_s+j_{sa}^{lk}-1} \sum_{\binom{(\quad)}{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{lk}}} \sum_{j_i=l_i+n-D}^{l_i-l+1} \\
 & \sum_{n_i=n+lk}^n \sum_{\binom{(n_i-j_s+1)}{n_{is}=n+lk-j_s+1}} \sum_{n_{ik}=n+lk_2+lk_3-j_{i-1}}^{n_{is}+j_s-j_{ik}-lk_1} \\
 & \sum_{\binom{(n_{ik}+j_{ik}-j_{sa}-lk_2)}{n_{sa}=n+lk_3-j_{sa}+1}} \sum_{\binom{(n_{sa}+j_{sa}-j_{i-1})}{n_s=n-j_i+1}} \\
 & \frac{(n_i-1)!}{(j_s-2)!(n_i-n_{is}+1)!} \cdot \\
 & \frac{(n_{is}-n_{ik}-lk_1-1)!}{(j_{ik}-j_s-1)!(n_{is}+j_{i-1}-n_{ik}-j_{ik}-lk_1)!} \cdot \\
 & \frac{(n_{ik}-n_{sa}-lk_2-1)!}{(j_{sa}-j_{ik}-1)!(n_{ik}+j_{i-1}-n_{sa}-j_{sa}-lk_2)!} \cdot \\
 & \frac{(n_{sa}-n_s-lk_3-1)!}{(j_{i-1}-j_{sa}-1)!(n_{i-1}+j_{sa}-n_s-j_i-lk_3)!} \cdot \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \\
 & \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \cdot \\
 & \frac{(l_i+j_{sa}-l_{sa}-s)!}{(j_{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j_{sa}-s)!} \cdot \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} \cdot
 \end{aligned}$$

$$\sum_{k=l}^{(l_{ik}-l-j_{sa}^{lk}+2)} \sum_{(j_s=l_i+n-D-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{lk}-1} \sum_{\binom{(\quad)}{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{lk}}} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+lk}^n \sum_{\binom{(n_i-j_s+1)}{n_{is}=n+lk-j_s+1}} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-lk_1}$$

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$$\frac{\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{(n_s=n_{sa}+j^{sa}-j_i-k_3)} (n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - k_1 - k_2 - k_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - k_1 - k_2 - k_3)!}$$

$$\frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - 1)!}{(D + j_s - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = j_{sa} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k_1$$

$$k_2 \cdot z = 3 \wedge k_1 + k_2 + k_3 \Rightarrow$$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)} \sum_{j_i=s+1}^{l_{ik}+j_{sa}^{ik}-l-s+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n+k_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-k_3}$$

$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
 & \frac{(n_s + n - n - 1)!}{(n_s + n - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(n - l - 1)!}{(n - l - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j^{sa} - l_{ik} - j^{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (l_{sa} + j^{sa} - j_{ik} - j^{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)} \\
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{k-l+1} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\cdot)} \sum_{j_i=l_{ik}+j_{sa}^{ik}-l-s+2}^{l_i-l+1} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
 \end{aligned}$$

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$$\begin{aligned}
 & \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{j_s=1}^{(n - j_i - l_i)} \sum_{j_{sa}=j_s}^{(n - j_i - l_i - j_s)} \sum_{j_{sa}^{ik}=j_{sa}}^{(n - j_i - l_i - j_s - j_{sa})} \sum_{j_{ik}=j_{sa}^{ik} + 1}^{(n - j_i - l_i - j_s - j_{sa} - j_{sa}^{ik} + 1)} \\
 & \sum_{j_i=j^{sa} + j_{sa}^{ik} - j_{sa}}^{(n - j_i - l_i - j_s - j_{sa} - j_{sa}^{ik} + 1)} \sum_{j_i=j_i + j_{sa} - s}^{(n - j_i - l_i - j_s - j_{sa} - j_{sa}^{ik} + 1)} \sum_{j_i=s+1}^{l_{ik} + j_{sa}^{ik} - l - s + 1} \\
 & \sum_{n_{is}=n + \mathbb{k}_1}^{(n - j_i - l_i - j_s - j_{sa} - j_{sa}^{ik} + 1)} \sum_{n_{ik}=n_{is} + j_s - j_{ik} - \mathbb{k}_1}^{(n - j_i - l_i - j_s - j_{sa} - j_{sa}^{ik} + 1)} \\
 & \sum_{(n_{sa}=n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(n - j_i - l_i - j_s - j_{sa} - j_{sa}^{ik} + 1)} \sum_{n_s=n_{sa} + j^{sa} - j_i - \mathbb{k}_3}^{(n - j_i - l_i - j_s - j_{sa} - j_{sa}^{ik} + 1)} \\
 & \frac{(n_i + j_s + j_{sa} - j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!} \cdot \\
 & \frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

$$D \geq n < n \wedge l \neq i \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=l}^{\lfloor \frac{j_s + j_{ik} - j_{sa}}{j_s - j_{ik} + 1} \rfloor} \sum_{j_{ik}=j_s-1}^{j_{sa} + j_{ik} - j_{sa}} \sum_{j_i=j_{sa}+1}^{l_s + s - l} \sum_{n=n+k}^n \sum_{n_{is}=n+k_1+1}^{n_i - j_s + 1} \sum_{n_{ik}=n+k_2+k_3 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - k_1} \sum_{n_{sa}=n+k_3 - j_{sa} + 1}^{n_{sa} + j_{sa} - j_i - k_3} \sum_{n_s=n-j_i+1}^{n_{sa} + j_{sa} - j_i - k_3} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\begin{aligned}
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{(\quad)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)} \\
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\quad)} \sum_{j_{s+s-l+1}}^{l_i-l+1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n+k_2+k_3)}^{n_{is}+j_s-k_1} \\
 & \frac{(n_{ik}+j_{ik}-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-j_i-k_2)!}{(n_{sa}-k_3-j^{sa}-1)! \cdot (j_i+1)!} \\
 & \frac{(n_{is}-n_{is}-1)!}{(j_s-2)! \cdot (n_{is}-j_s+1)!} \\
 & \frac{(n_{is}-n_{is}-k_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-k_1)!} \\
 & \frac{(n_{ik}-n_{sa}-k_2-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-k_2)!} \\
 & \frac{(n_{sa}-n_s-k_3-1)!}{(j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-k_3)!} \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \\
 & \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \\
 & \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} - \\
 & \sum_{k=l}^{(\quad)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)}
 \end{aligned}$$

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$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)} \sum_{j_i=s+1}^{l_s+s-l}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{(n_s=n_{sa}+j_{sa}-j_i-k_3)}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - k_1 - k_2 - k_3 - j_{sa}^s)!}{(n_i - n - k_1 - k_2 - k_3)!}$$

$$\frac{(n + j_s - j^{sa} - j_i - 2 \cdot j_{sa}^s)!}{(l_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_s - l)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l \neq i \wedge l_i \leq i + s - n$
 $1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} - j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$
 $j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - j_{sa}^{ik} \wedge j_{sa} \leq j_i \leq n \wedge$
 $l_{ik} - j_{sa} + j_{sa}^{ik} = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{sa} \wedge l_i + j_{sa} - s = l_{sa} \wedge$
 $D \geq n < n \wedge l - i > 0 \wedge$
 $j_{sa} < j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa} < j_{sa}^{ik} - 1 \wedge$
 $S: \{j_{sa}^s, \dots, j_{sa}^{ik}, \dots, k_1, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$
 $s \geq j_{sa} = s + k \wedge$
 $k_z: z = 3 \wedge k_z = k_1 + k_2 + k_3 \Rightarrow$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=l} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(n)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j_{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(l_{ik}+j_{sa}^{ik}-l-s+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\begin{aligned}
& \sum_{n_i=n+l}^n \sum_{\substack{(n_i-j_s+1) \\ (n_{i_s}=n+l-j_s+1)}} \sum_{\substack{n_{i_s}+j_s-j_{ik}-l_{k_1} \\ n_{ik}=n+l_{k_2}+l_{k_3}-j_{ik}+1}} \\
& \sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-l_{k_2}) \\ (n_{sa}=n+l_{k_3}-j^{sa}+1)}} \sum_{\substack{n_{sa}+j^{sa}-j_i-l_{k_3} \\ n_s=n-j_i+1}} \\
& \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \\
& \frac{(n_{i_s} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{i_s} + j_s - j_{ik} - l_{k_1})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
& \frac{(n_{sa} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{sa} + j^{sa} - n_s - l_{k_3})!} \cdot \\
& \frac{(n_s - 1)!}{(n_{sa} + j_i - n_s - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa})! \cdot j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=l} \sum_{\binom{()}{j_s=j_{ik}-j_{sa}^{ik}+1}}
\end{aligned}$$

$$\begin{aligned}
& \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}-l+1} \sum_{\substack{(l_{sa}-l+1) \\ (j^{sa}=l_{ik}+j_{sa}^{ik}-l-s+2)}} \sum_{j_i=j^{sa}+s-j_{sa}} \\
& \sum_{n_i=n+l}^n \sum_{\substack{(n_i-j_s+1) \\ (n_{i_s}=n+l-j_s+1)}} \sum_{\substack{n_{i_s}+j_s-j_{ik}-l_{k_1} \\ n_{ik}=n+l_{k_2}+l_{k_3}-j_{ik}+1}} \\
& \sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-l_{k_2}) \\ (n_{sa}=n+l_{k_3}-j^{sa}+1)}} \sum_{\substack{n_{sa}+j^{sa}-j_i-l_{k_3} \\ n_s=n-j_i+1}}
\end{aligned}$$

$$\begin{aligned}
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2 - 1)!} \cdot \\
& \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
& \frac{(n_s + j_i - n - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(n_s - l - 1)!}{(n_s - l - 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} + j^{sa} - l_{ik} - j^{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (l_{sa} + j^{sa} - j_{ik} - j^{sa})!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{k=l}^{\binom{D}{j_s}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{\binom{D}{j_s}} \\
& \sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}}^{(l_{ik} + j_{sa}^{ik} - l - s + 1)} \sum_{(j^{sa} = j_{sa} + 1)} \sum_{j_i = j^{sa} + s - j_{sa}} \\
& \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1} \\
& \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{\binom{D}{j_s}} \sum_{n_s = n_{sa} + j^{sa} - j_i - \mathbb{k}_3} \\
& \frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!} \cdot \\
& \frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot
\end{aligned}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$fz S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{(l_s+j_{sa}-l)} \sum_{(j^{sa}=j_{sa}+1)}^{(l_s+j_{sa}-l)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+k}^{(n_i-j_s+1)} \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n+k_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-k_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!}$$

$$\frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!}$$

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$$\begin{aligned}
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{l=0}^{j_s - j_{ik} - j_{sa}^{ik}} \sum_{j_i = j_{ik} - j_{sa}^{ik} + l + 1}^{j_s - j_{ik} - j_{sa}^{ik} + l + 1} \\
 & \sum_{j_{ik} = j_{ik} - j_{sa}^{ik} + l + 1}^{j_s - j_{ik} - j_{sa}^{ik} + l + 1} \sum_{j_i = j_{ik} - j_{sa}^{ik} + l + 1}^{j_s - j_{ik} - j_{sa}^{ik} + l + 1} \\
 & \sum_{n_i = n_{is} - n_{ik} - \mathbb{k}_1}^n \sum_{n_{is} = n_{is} - n_{ik} - \mathbb{k}_1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \\
 & \sum_{n_{ik} = n_{ik} - j_{sa} - \mathbb{k}_2}^{n_{ik} - j_{sa} - \mathbb{k}_2} \sum_{n_{sa} = n_{sa} + j_{sa} - j_i - \mathbb{k}_3}^{n_{sa} + j_{sa} - j_i - \mathbb{k}_3} \\
 & \sum_{(n_{sa} = n_{sa} + j_{sa} - j_i - \mathbb{k}_3)} \sum_{n_s = n - j_i + 1} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot
 \end{aligned}$$

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$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)} \sum_{j_{ik}=j_{sa}^{sa}+j_{sa}^{lk}-j_{sa}}^{(l_s+j_{sa}-l)} \sum_{(j_{sa}^{sa}=j_{sa}^{sa}+1)}^{(l_s+j_{sa}-l)} j_{ik}^{sa+s-j_{sa}} \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-l_k}^{(n_i-j_s+1)} \frac{(n_i+2 \cdot j_s + j_{sa} - j_{sa}^{sa} - j_i - l_{k_1} - l_{k_2} - l_{k_3} - 2 \cdot j_{sa}^s)!}{(n_i - n - l_{k_1} - l_{k_2} - l_{k_3})!} \frac{1}{(2 \cdot j_s + j_{sa} - j_{sa}^{sa} - j_i - 2 \cdot j_{sa}^s)!} \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_i = l \wedge l_i \leq D + s - 1 \wedge$$

$$1 \leq j_{ik} - j_{sa}^{ik} + j_s + j_{sa} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq j_{sa} + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - l_{k_1} + 1 = j_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge l = l_k > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, \dots, l_{k_2}, j_{sa}, \dots, l_{k_3}, j_{sa}^l\} \wedge$$

$$s \geq 7 \wedge s = s + l_k \wedge$$

$$l_{k_2}: z = 3 \wedge l_k = l_{k_1} + l_{k_2} + l_{k_3} \Rightarrow$$

$$\begin{aligned}
 f_{z^S} S_{j_s, j_{ik}, j^{sa}, j_i} &= \sum_{k=l}^{(\quad)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)} \\
 &\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}-l+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{(\quad)} \\
 &\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 &\sum_{(n_{sa}=n+l_{k_3}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}+j_{sa}-j_i-l_{k_3})} \sum_{n_s=n-j_i+l_{k_3}}^{(\quad)} \\
 &\frac{(n_i-n_{ik}-l_{k_1}-1)!}{(j_s-2)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-l_{k_1})!} \\
 &\frac{(n_{ik}-n_{sa}-l_{k_2}-1)!}{(j_{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-l_{k_2})!} \\
 &\frac{(n_{sa}-n_s-l_{k_3}-1)!}{(j_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-l_{k_3})!} \\
 &\frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \\
 &\frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \\
 &\frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \\
 &\frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} \\
 &\sum_{k=l}^{(\quad)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)} \\
 &\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}-l+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\quad)} \sum_{j_i=j^{sa}+s-j_{sa}}^{(\quad)}
 \end{aligned}$$

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$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3} \frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - k_1 - k_2 - k_3 - 2 \cdot j_s)!}{(n_i - n - k_1 - k_2 - k_3)!} \cdot \frac{1}{(n + 2 \cdot j_s + j_{sa} - j_i - j_s \cdot j_{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!} \cdot \frac{(D - l)!}{(D - j_i - n - l + 1)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} < j^{sa} + j_{sa}^{ik} - j_i \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa}^{ik} + s - j_i \leq j_i \leq j_{ik} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa} - j_{sa} > l_{ik} \wedge l_{sa} + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} < j_{sa}^{ik} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{s-1}, \dots, k_2, j_{sa}^{s-2}, \dots, k_3, \dots\} \wedge$$

$$s \geq 1 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$f_z^S(j_s, j_{ik}, j^{sa}, j_i) = \sum_{k=l} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()} \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{ik} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - n_{ik} - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}$$

$$\frac{(n_s - 1)!}{(n - j_i - 1)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - l_{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l}^{(\)} \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}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}$$

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$$\frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - l_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^i < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=2)} \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(l_{sa}-l+1)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+s-j_{sa}} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_{sa}=n+k_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-k_3} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i - 1)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (n_{sa} + j_{sa}^{lk} - j_{sa}^{ik} - l_{sa})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{l=1}^{j_{sa}^{ik+2}}$$

$$\sum_{j_s=j_s+1}^{n} \sum_{j_{ik}=j_{ik}+1}^{n} \sum_{j_i=j_i+1}^{n}$$

$$\sum_{i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}$$

$$\frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$\sum_{j_s=2}^{(l_s-l)} \sum_{j_i=j^{sa}+s-j_{sa}}^{(l_s-l+1)} \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(n_i-j_s)} \sum_{j_{ik}=n+k_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{n_{sa}=n+k_3-j^{sa}+1}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-k_3} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

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$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l}^{(l_s - l + 1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{lk}-1}^{()} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa})}^{()} \sum_{(j_{sa}^{lk}=j_{sa}-j_{sa})}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_i=n+l_k)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n+l_k+j_s-j_{ik}-l_{k_1})}$$

$$\sum_{(n_{sa}=n_{ik}+j_{sa}-l_{k_2})}^{()} \sum_{(n_{sa}=n_{ik}+j_{sa}-l_{k_3})}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j_{sa} - j_i - l_{k_2} - l_{k_3} - 2 \cdot j_{sa}^s)!}{(n_i + n - l_{k_1} - l_{k_2} - l_{k_3})!}$$

$$1$$

$$\frac{1}{n + 2 \cdot j_s + j_{sa} - j_{sa} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n \wedge l \neq i \wedge l \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - l_{k_1} + 1 \wedge j_s + j_{sa}^{lk} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{lk} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - l_{k_1} \leq j_{sa} \leq j_i + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{lk} + 1 = l_s \wedge l_{sa} + j_{sa}^{lk} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, \dots, l_{k_2}, j_{sa}, \dots, l_{k_3}, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(\quad)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\quad)} \sum_{j_i=n-D}^{l_{ik}+s-l-j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_i+1)}^{+j_s-j_i-\mathbb{k}_1}$$

$$\frac{(n_{is}-j_s+1)! \cdot (n_{ik}+j_s-n_{sa}-j_i-\mathbb{k}_1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!}$$

$$\frac{(n_{is}-n_{sa}-\mathbb{k}_1-1)!}{(j_s-2)! \cdot (n_{ik}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_i-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(l-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}$$

$$\frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!}$$

$$\frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!}$$

$$\frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}$$

$$\frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} +$$

$$\sum_{k=l}^{(\quad)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)}$$

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$$\begin{aligned}
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}-l+1} \binom{(\quad)}{\quad} \sum_{j_i=l_{ik}+s-l-j_{sa}^{ik}+2}^{l_i-l+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k+l_{k_2}+l_{k_3}-j_{ik}-1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n+l_{k_3}-j_{sa}+1)}^{(n_{ik}+j_{ik}-j_{sa}-l_{k_2})} \sum_{n_s=j_i+1}^{n_{sa}+j_{sa}-j_i-1} \\
 & \frac{(n_i-1)!}{(j_s-2)! \cdot (n_i-n_{is}+1)!} \cdot \\
 & \frac{(n_{is}-n_{ik}-l_{k_2}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}-n_{ik}-j_{ik}-l_{k_1})!} \cdot \\
 & \frac{(n_{ik}-n_{sa}-l_{k_2}-1)!}{(j_{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{sa}-n_{sa}-j_{sa}-l_{k_2})!} \cdot \\
 & \frac{(n_{sa}-n_s-l_{k_3}-1)!}{(j_i-j_{sa}-1)! \cdot (n_{sa}+j_{sa}-n_s-j_i-l_{k_3})!} \cdot \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \\
 & \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \cdot \\
 & \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(l_{ik}+l_{sa}-j_{sa}-l_{ik})! \cdot (j_{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} \cdot
 \end{aligned}$$

$$\sum_{k=l}^{(\quad)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)}$$

$$\sum_{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}^{(\quad)} \sum_{(j_{sa}=j_i+j_{sa}-s)}^{(\quad)} \sum_{j_i=l_i+n-D}^{l_{ik}+s-l-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3} (n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - k_1 - k_2 - k_3 - 2 \cdot j_{sa}^s)! / (n_i - n - k_1 - k_2 - k_3)!$$

$$\frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - 1)!}{(D + j_s - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa}^{ik} + j_{sa}^{ik} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = j_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa} < j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^s\} \wedge$$

$$s \geq 7 \wedge s = s - k \wedge$$

$$k_z = 3 \wedge k = k_1 + k_2 + k_3$$

$$f_z^{S_{j_s, j_{ik}, j^{sa}, j_i}} = \sum_{k=l}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{()} \sum_{j_i=l_i+n-D}^{l_s+s-l}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1}$$

$$\frac{\sum_{(n_{sa}=n+k_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-k_3}}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{ik} - k_2)!} \cdot$$

$$\frac{(n_{sa} - n_{is} - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n - j_i - 1)!} \cdot$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - l_{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=l}^{(\quad)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\quad)} \sum_{j_i=l_s+s-l+1}^{l_i-l+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n+k_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-k_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

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$$\begin{aligned}
& \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} + l_{sa} - j^{sa} - \mathbb{k}_1 - 1)! \cdot (j^{sa} + j_s - j_{ik} - j_{sa})!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)} \\
& \sum_{=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\cdot)} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\cdot)} \sum_{j_i=l_i+n-D}^{l_s+s-l} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\cdot)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \\
& \frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!} \cdot \\
& \frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
\end{aligned}$$

$$\begin{aligned}
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{l=1}^{\infty} \sum_{j_s=j_{ik}-j_{sa}^{l_i}}^{\infty} \\
 & \sum_{j_{ik}=j_{sa}^{ik}+l_{ik}+j_s-l_{ik}+2}^{l_{ik}-l+1} \sum_{j_i=j_{sa}^{i_s}+s-j_{sa}}^{l-s+1} \\
 & \sum_{n_{ik}+l_{k_1}+l_{k_2}+l_{k_3}=n_{ik}+l_{k_2}+l_{k_3}-j_{ik}+1}^{n_{ik}+l_{k_1}+1} \sum_{n_{is}+j_s-j_{ik}-l_{k_1}}^{n_{is}+1} \\
 & \sum_{n_{sa}+j^{sa}-l_{k_2}}^{n_{sa}+j^{sa}-j_i-l_{k_3}} \sum_{n_{sa}=n+l_{k_3}-j^{sa}+1}^{n_{sa}+1} \sum_{n_s=n-j_i+1}^{n_s+1} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - l_{k_1})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - n_s - l_{k_3} - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - l_{k_3})!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot
 \end{aligned}$$

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$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)} \sum_{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}^{(l_{ik}+j_{sa}-l-j_{sa}^{ik}+1)} \sum_{(j_{sa}=l_i+n+j_{sa}-D-s)}^{(n_i-j_s+1)} \sum_{j_{sa}+s-j_{sa}}^{(n_i-j_s+1)} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_{sa})}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s}^{(n_i-j_s+1)} \sum_{(n_{ik}+j_{sa}-k_2) \dots}^{(n_i-j_s+1)} \sum_{(n_i-k_1-k_2-k_3-2 \cdot j_{sa}^s)!}^{(n_i-k_1-k_2-k_3-2 \cdot j_{sa}^s)!} \frac{1}{(n_i+2 \cdot j_s+j_{sa}-j_{sa}^s-j_i-k_1-k_2-k_3-2 \cdot j_{sa}^s)!} \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!}$$

$D \geq n < n \wedge l_i \leq D - n - 1 \wedge$

$1 \leq j_{ik} - j_{sa}^{ik} + j_s + j_{sa} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq j_{sa} + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s + l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$D + s - n - l_i \leq D + l_s + s - n - 1 \wedge$

$n - l_i \wedge I = k > 0 \wedge$

$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^i - 1 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 7 \wedge s = s + k \wedge$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(\)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)}^{(l_s+j_{sa}-l)} \sum_{j_i=j^{sa}+s-j_{sa}}^{(n_i-j_s+1)}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}+j_{ik}-n_{sa}-j^{sa}-k-k_1}^{n_{is}+j_{is}-k-k_1}$$

$$\sum_{(n_{ik}+j_{ik}-n_{sa}-j^{sa}-k-k_2)}^{(n_{ik}+j_{ik}-n_{sa}-j^{sa}-k-k_2)} \sum_{(n_{sa}+j^{sa}-n_s-j_i-k_2)}^{(n_{sa}+j^{sa}-n_s-j_i-k_2)}$$

$$\frac{(n_i - n_{is})}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{ik} + j_s - n_{ik} - j_{ik} - k_1)!}$$

$$\frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!}$$

$$\frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=l}^{(\)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\)}$$

$$\begin{aligned}
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=l_s+j_{sa}-l+1)}^{(l_i+j_{sa}-l-s+1)} \sum_{j_i=j^{sa}+s-j_{sa}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k+l_3-j_i}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n+l_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{n_s=j_i+1}^{n_{sa}+j^{sa}-j_i-1} \\
 & \frac{(n_i-1)!}{(j_s-2)! \cdot (n_i-n_{is}-1)!} \cdot \\
 & \frac{(n_i-n_{ik}-l_{k_1}-1)!}{(j_{ik}-j_s-1)! \cdot (n_i-n_{ik}-j_{ik}-l_{k_1})!} \cdot \\
 & \frac{(n_{ik}-n_{sa}-l_{k_2}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-l_{k_2})!} \cdot \\
 & \frac{(n_{sa}-l_3-l_{k_3}-1)!}{(j_i-n_{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-l_{k_3})!} \cdot \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \\
 & \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \cdot \\
 & \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(l_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} \cdot
 \end{aligned}$$

$$\sum_{k=l}^{\binom{()}{}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\begin{aligned}
 & \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)}^{(l_s+j_{sa}-l)} \sum_{j_i=j^{sa}+s-j_{sa}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}}
 \end{aligned}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3} (n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - k_1 - k_2 - k_3 - 2 \cdot j_{sa}^s)! / (n_i - n - k_1 - k_2 - k_3)!$$

$$\frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - 1)!}{(D + j_s - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = j_{sa} \wedge$

$D + s - n < l_i \leq D + l_s + s - n \wedge$

$D \geq n < n \wedge l = k > 0 \wedge$

$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa} < j_{sa}^{ik} - 1$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^s\} \wedge$

$s \geq 7 \wedge s = s - k \wedge$

$k_z = 3 \wedge k = k_1 + k_2 + k_3$

$$fz^{S_{j_s, j_{ik}, j_{sa}, j_i}} = \sum_{k=l}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_i+n+j_{sa}^{ik}-D-s-1} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)}^{(l_i+j_{sa}-l-s+1)} \sum_{j_i=j_{sa}^s+j_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1}$$

$$\frac{\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1 - 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{ik} - \mathbb{k}_2 - 1)!} \cdot \frac{(n_{sa} - n_{sa} - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3 - 1)!} \cdot \frac{(n_s - 1)!}{(n - j_i - 1)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - l_{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=l}^{(\quad)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_{ik}-l+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_i+j_{sa}-l-s+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\frac{\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

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$$\begin{aligned}
& \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j^{sa})!}{(j_{ik} + l_{sa} - j^{sa})! \cdot (j^{sa} + j_{sa} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)} \\
& \sum_{j_{ik}=l_i+l}^{l+1} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\cdot)} \sum_{j_i=j^{sa}+s-j_{sa}}^{(\cdot)} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\cdot)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \\
& \frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!} \cdot \\
& \frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
\end{aligned}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$\sum_{j_s=j_{ik}-j_{sa}^{ik}+1}^{j_s=j_{ik}-j_{sa}^{ik}+1} \sum_{j_i=j_{sa}+s-j_{sa}}^{j_i=j_{sa}+s-j_{sa}} \sum_{j_{ik}=j_{sa}+s-j_{sa}}^{j_{ik}=j_{sa}+s-j_{sa}} \sum_{j_{sa}^{ik}=j_{sa}+s-j_{sa}}^{j_{sa}^{ik}=j_{sa}+s-j_{sa}} \sum_{j_{sa}^s=j_{sa}+s-j_{sa}}^{j_{sa}^s=j_{sa}+s-j_{sa}} \sum_{j_{sa}^i=j_{sa}+s-j_{sa}}^{j_{sa}^i=j_{sa}+s-j_{sa}} \sum_{j_{sa}^k=j_{sa}+s-j_{sa}}^{j_{sa}^k=j_{sa}+s-j_{sa}} \sum_{j_{sa}^l=j_{sa}+s-j_{sa}}^{j_{sa}^l=j_{sa}+s-j_{sa}} \sum_{j_{sa}^m=j_{sa}+s-j_{sa}}^{j_{sa}^m=j_{sa}+s-j_{sa}} \sum_{j_{sa}^n=j_{sa}+s-j_{sa}}^{j_{sa}^n=j_{sa}+s-j_{sa}} \sum_{j_{sa}^o=j_{sa}+s-j_{sa}}^{j_{sa}^o=j_{sa}+s-j_{sa}} \sum_{j_{sa}^p=j_{sa}+s-j_{sa}}^{j_{sa}^p=j_{sa}+s-j_{sa}} \sum_{j_{sa}^q=j_{sa}+s-j_{sa}}^{j_{sa}^q=j_{sa}+s-j_{sa}} \sum_{j_{sa}^r=j_{sa}+s-j_{sa}}^{j_{sa}^r=j_{sa}+s-j_{sa}} \sum_{j_{sa}^s=j_{sa}+s-j_{sa}}^{j_{sa}^s=j_{sa}+s-j_{sa}} \sum_{j_{sa}^t=j_{sa}+s-j_{sa}}^{j_{sa}^t=j_{sa}+s-j_{sa}} \sum_{j_{sa}^u=j_{sa}+s-j_{sa}}^{j_{sa}^u=j_{sa}+s-j_{sa}} \sum_{j_{sa}^v=j_{sa}+s-j_{sa}}^{j_{sa}^v=j_{sa}+s-j_{sa}} \sum_{j_{sa}^w=j_{sa}+s-j_{sa}}^{j_{sa}^w=j_{sa}+s-j_{sa}} \sum_{j_{sa}^x=j_{sa}+s-j_{sa}}^{j_{sa}^x=j_{sa}+s-j_{sa}} \sum_{j_{sa}^y=j_{sa}+s-j_{sa}}^{j_{sa}^y=j_{sa}+s-j_{sa}} \sum_{j_{sa}^z=j_{sa}+s-j_{sa}}^{j_{sa}^z=j_{sa}+s-j_{sa}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{l=1}^{j_s} (j_s = j_{ik} - j_{sa}^{ik})$$

$$\sum_{l_{ik}=l_i+n+j_{sa}^{ik}-l}^{l_s+j_{sa}^{ik}-l} \sum_{j^{sa}=j_{sa}-j_{sa}^{ik}}^{l-s+1} (j^{sa}=j_{sa}-j_{sa}^{ik}) j_i=j^{sa}+s-j_{sa}$$

$$\sum_{n_{is}=n+l_{ik}-1}^n (n_{is}+1) \sum_{n_{ik}=n+l_{k_2}+l_{k_3}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}}$$

$$\sum_{(n_{sa}=n+l_{k_3}-j^{sa}+1)}^{(j_{ik}-j^{sa}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-l_{k_3}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - l_{k_1})!}$$

$$\frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!}$$

$$\frac{(n_{sa} - n_s - l_{k_3} - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - l_{k_3})!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

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$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{lk}-D-s}^{l_s+j_{sa}^{lk}-l} \sum_{(j^{sa}=j_i+j_{sa}-j_{sa}^{lk})} \sum_{(j_{sa}=j_{sa}-j_{sa}^{lk})}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_i=j_i+l_k-j_s)}^{(n_i-j_s+1)} \sum_{(n_i=j_i+l_k-j_s-j_{ik}-l_{k_1})}$$

$$\sum_{(n_{sa}=n_{ik}+j_{sa}-l_{k_2})}^{(\cdot)} \sum_{(n_{sa}=n_{ik}+j_{sa}-l_{k_3})}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - l_{k_2} - l_{k_3} - 2 \cdot j_{sa}^s)!}{(n_i - l_{k_1} - l_{k_2} - l_{k_3})!}$$

$$\frac{1}{n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\geq n < n \wedge l \neq i \wedge l \leq D - n + 1 \wedge$$

$$1 \leq j \leq j_{ik} - j_{sa} \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_s - j_{sa}^{ik} - l = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_i+n-D-s)} \sum_{(j_s=2)}^{(l_i+n-D-s)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(l_i+j_{sa}-l-s+1)} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)}^{(l_i+j_{sa}-l-s+1)} \sum_{j_i=l_i+j_{sa}-j_{sa}}^{(l_i+j_{sa}-l-s+1)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_s+1)}^{(n_{is}+j_s-j_{sa}-\mathbb{k}_1)}$$

$$\frac{(n_{is}-n_{sa}-\mathbb{k}_1-1)!}{(j_s-2)! \cdot (n_{is}-j_s+1)!}$$

$$\frac{(n_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}{(j^{sa}-j_i-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}$$

$$\frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!}$$

$$\frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!}$$

$$\frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}$$

$$\frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} +$$

$$\sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=l_i+n-D-s+1)}$$

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$$\begin{aligned}
 & \sum_{j_{ik}=j_s+j_{sa}^{lk}-1} \sum_{(l_i+j_{sa}-l-s+1)}^{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{lk})} \sum_{j_i=j_{sa}+s-j_{sa}} \\
 & \sum_{n_i=n+lk}^n \sum_{(n_i-j_s+1)}^{(n_{is}=n+lk-j_s+1)} \sum_{n_{ik}=n+lk_2+lk_3-j_i}^{(n_{is}+j_s-j_{ik}-lk_1)} \\
 & \sum_{(n_{sa}=n+lk_3-j_{sa}+1)}^{(n_{ik}+j_{ik}-j_{sa}-lk_2)} \sum_{n_s=j_i+1}^{(n_{sa}+j_{sa}-j_i)} \\
 & \frac{(n_i-1)!}{(j_s-2)!(n_i-n_{is}+1)!} \cdot \\
 & \frac{(n_i-n_{ik}-lk_1-1)!}{(j_{ik}-j_s-1)!(n_i-n_{is}-j_{ik}-lk_1)!} \cdot \\
 & \frac{(n_{ik}-n_s-lk_2-1)!}{(j_{sa}-j_{ik}-1)!(n_{ik}+j_{sa}-n_{sa}-j_{sa}-lk_2)!} \cdot \\
 & \frac{(n_{sa}-n_s-lk_3-1)!}{(j_i-j_{sa}-1)!(n_{ik}+j_{sa}-n_s-j_i-lk_3)!} \cdot \\
 & \frac{(n_s-1)!}{(l_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \\
 & \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \cdot \\
 & \frac{(l_{sa}+j_{sa}^{lk}-l_{ik}-j_{sa})!}{(l_{ik}+l_{sa}-j_{sa}-l_{ik})! \cdot (j_{sa}+j_{sa}^{lk}-j_{ik}-j_{sa})!} \cdot \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} \cdot
 \end{aligned}$$

$$\sum_{k=l}^{(l_{ik}-l-j_{sa}^{lk}+2)} \sum_{(j_s=l_i+n-D-s+1)}$$

$$\begin{aligned}
 & \sum_{j_{ik}=j_s+j_{sa}^{lk}-1} \sum_{()}^{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{lk})} \sum_{j_i=j_{sa}+s-j_{sa}} \\
 & \sum_{n_i=n+lk}^n \sum_{(n_i-j_s+1)}^{(n_{is}=n+lk-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-lk_1}
 \end{aligned}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}$$

$$\frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - 1)!}{(D + j_s - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = j_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa} < j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s - \mathbb{k} \wedge$$

$$\mathbb{k}_z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3$$

$$fz^{S_{j_s, j_{ik}, j^{sa}, j_i}} = \sum_{k=l}^{(l_i+n-D-s)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(l_i+j_{sa}-l-s+1)} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\frac{\sum_{(n_{sa}=n+k_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-k_3}}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{ik} - k_2)!}$$

$$\frac{(n_{sa} - n_{is} - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_{is} - j_i - k_3)!}$$

$$\frac{(n_s - 1)!}{(n - j_i - 1)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - l_{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_i+n-D-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(l_i+j_{sa}-l-s+1)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n+k_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-k_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

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$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - 1)!}{(j_{ik} + l_{sa} - j^{sa})! \cdot (j^{sa} + j_{sa} - j_{ik} - j_{sa})!}$$

$$\frac{(D - l)!}{(D + j_i - n - l)! \cdot (n - j_i)!}$$

$$\sum_{k=l}^{(l_s - l + 1)} \sum_{(j_s = l_i + n - D - s + 1)}$$

$$\sum_{j_{ik} = n_s + j_{sa}^{ik} - 1} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})} \sum_{j_i = j^{sa} + s - j_{sa}}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{()} \sum_{n_s = n_{sa} + j^{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}$$

$$\frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

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$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{l=1}^{j_s} \sum_{j_i=j_{ik}-j_{sa}^{l_i}}$$

$$l_{ik}-l+1 \quad l_{sa}-l-j_{sa}+1$$

$$j_{ik}=j_s-1 \quad (j^{sa}=j_s-1-s) \quad j_i=l_{ik}+s-1-j_{sa}^{l_i}+2$$

$$\sum_{n_{ik}=n+l_{ik}-j_{ik}+1}^n \sum_{n_{is}=n+l_{ik}-j_{ik}-1}^{(j_s+1)} \sum_{n_{is}+j_s-j_{ik}-l_{k_1}}^{n_{is}+j_s-j_{ik}-l_{k_1}}$$

$$\sum_{(n_{sa}=n+l_{k_3}-j^{sa}+1)}^{(n_{sa}=n+l_{k_3}-j^{sa}+1)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-l_{k_3}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - l_{k_1})!}$$

$$\frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!}$$

$$\frac{(n_{sa} - n_s - l_{k_3} - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - l_{k_3})!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

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$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)} \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\cdot)} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\cdot)} \sum_{j_i=l_{sa}+j_{sa}-s-D-j_{sa}}^{l_{ik}+s-l-j_{sa}^{ik}+1} \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_{sa}^{ik}+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^{ik}-l_{k_1}}^{(\cdot)} \sum_{(n_{is}+j_{sa}^{ik}-l_{k_2})}^{(\cdot)} \sum_{(n_{ik}+j_{sa}^{ik}-l_{k_3})}^{(\cdot)} \frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - l_{k_1} - l_{k_2} - l_{k_3} - 2 \cdot j_{sa}^s)!}{(n_i - n - l_{k_1} - l_{k_2} - l_{k_3} - 2 \cdot j_{sa}^s)!} \frac{1}{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!} \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_{sa} \leq l \wedge l_s \geq D - n - l \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_{sa} + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s - j_{sa}^{ik} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$D + j_{sa} - l_{sa} \leq l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$

$n - l_{sa} \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, \dots, l_{k_2}, j_{sa}, \dots, l_{k_3}, j_{sa}^i\} \wedge$

$s \geq 7 \wedge s = s + \mathbb{k} \wedge$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(\quad)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\quad)} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_s+s-l}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\dots}^{n_{is}+j_s-\mathbb{k}-\mathbb{k}_1}$$

$$\frac{(n_i - n_{is})}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{ik} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_2 - 1)!}{(j^{sa} - \dots - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - \dots - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=l}^{(\quad)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)}$$

$$\begin{aligned}
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-l} \binom{(\quad)}{j^{sa}=j_i+j_{sa}-s} \sum_{j_i=l_s+s-l+1}^{l_{sa}+s-l-j_{sa}+1} \\
 & \sum_{n_i=n+k}^n \sum_{n_{is}=n+k-j_s+1}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3-j_i}^{n_{is}+j_s-j_{ik}-k_1} \\
 & \sum_{n_{sa}=n+k_3-j_{sa}+1}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-1} \\
 & \frac{(n_i-1)!}{(j_s-2)! \cdot (n_i-n_{is}-1)!} \cdot \frac{(n_i-n_{ik}-k_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_i-n_{ik}-j_{ik}-k_1)!} \\
 & \frac{(n_{ik}-n_{sa}-k_2-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-k_2)!} \cdot \frac{(n_{sa}-n_s-k_3-1)!}{(j_i-n_{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-k_3)!} \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \\
 & \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(l_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!}
 \end{aligned}$$

$$\sum_{k=l}^{\binom{(\quad)}{j_s=j_{ik}-j_{sa}^{ik}+1}}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{\binom{(\quad)}{j^{sa}=j_i+j_{sa}-s}} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_s+s-l}$$

$$\sum_{n_i=n+k}^n \sum_{n_{is}=n+k-j_s+1}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3} (n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - k_1 - k_2 - k_3 - 2 \cdot j_{sa}^s)! / (n_i - n - k_1 - k_2 - k_3)!$$

$$\frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - 1)!}{(D + j_{sa} - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa}^{ik} + j_{sa}^{ik} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} - l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa}^{ik} - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa} < j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^s\} \wedge$$

$$s \geq 7 \wedge s = s - k \wedge$$

$$k_z = 3 \wedge k = k_1 + k_2 + k_3$$

$$f_z^{S_{j_s, j_{ik}, j^{sa}, j_i}} = \sum_{k=l}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa} (l_{ik}+j_{sa}-l-j_{sa}^{ik}+1)} \sum_{(j^{sa}=l_{sa}+n-D)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1}$$

$$\begin{aligned}
 & \sum_{(n_{sa}=n+l_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-l_3} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - l_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - l_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{ik} - l_2)!} \cdot \\
 & \frac{(n_{sa} - n_{sa} - l_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - l_3)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - 1)!} \cdot (n - j_i)! \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + l_{sa} - j_{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{(\quad)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)} \\
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}-l+1} \sum_{(j^{sa}=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2)}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}} \\
 & \sum_{n_i=n+l}^n \sum_{(n_{is}=n+l-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_2+l_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_1} \\
 & \sum_{(n_{sa}=n+l_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-l_3} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
 \end{aligned}$$

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$$\begin{aligned}
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa} - 1)!}{(j_{ik} + l_{sa} - j^{sa} - 1)! \cdot (j^{sa} + j_{sa} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)} \\
 & \sum_{j_{ik}=j_{sa}^{ik}-j_{sa}}^{(\cdot)} \sum_{(j^{sa}=l_{sa}+n-D)}^{(\cdot)} \sum_{j_i=j^{sa}+s-j_{sa}}^{(\cdot)} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\cdot)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}^{(\cdot)} \\
 & \frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!} \cdot \\
 & \frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

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$$D \geq n < n \wedge l \neq i l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$\sum_{j_s=j_{ik}-j_{sa}^{ik}+1}^{\dots} \sum_{j_i=j_{sa}+s-j_{sa}}^{\dots} \sum_{j_{ik}=j_{sa}^{ik}+1}^{\dots} \sum_{j_{sa}=l_{sa}+n-D}^{\dots} \sum_{j_i=n+k}^{\dots} \sum_{n_{is}=n+k-j_s+1}^{\dots} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{\dots} \sum_{n_{sa}=n+k_3-j_{sa}+1}^{\dots} \sum_{n_s=n-j_i+1}^{\dots} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!}$$

$$\begin{aligned}
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{l=0}^{j_s - j_{ik} - j_{sa}^{ik}} \sum_{j_i = j_{ik} - j_{sa}^{ik} + l + 1}^{j_{ik} - j_{sa}^{ik} + l + 1} \sum_{j_s = j_{ik} - j_{sa}^{ik} + l + 1}^{j_{ik} - j_{sa}^{ik} + l + 1} \\
 & \sum_{n_i = n - l_{ik} - l_{k_1} - j_{ik} + 1}^n \sum_{n_{is} = n + l_{k_1} - j_{ik} + 1}^{(n_{is} + 1)} \sum_{n_{ik} = n + l_{k_2} + l_{k_3} - j_{ik} + 1}^{(n_{is} + 1)} \sum_{n_{sa} = n + l_{k_3} - j^{sa} + 1}^{(n_{is} + 1)} \sum_{n_s = n - j_i + 1}^{(n_{is} + 1)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - l_{k_1})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - n_s - l_{k_3} - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - l_{k_3})!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot
 \end{aligned}$$

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$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)} \sum_{j_{ik}=j^{sa}+j_{sa}^{lk}-j_{sa}}^{(l_s+j_{sa}-l)} \sum_{(j^{sa}=l_{sa}+n-D)}^{(n_i-j_s+1)} \sum_{(n_i=n+l_k)}^{(n_i=n+l_k-1)} \sum_{(n_{ik}=n_{is}+j_s-l_k)}^{(n_{is}=n+l_k-1)} \sum_{(n_{is}=n+l_k-1)}^{(n_{is}=n+l_k-1)} \sum_{(n_{is}=n+l_k-1)}^{(n_{is}=n+l_k-1)} \frac{(n_i + 2 \cdot j_s + j_{sa} - j_{sa} - j_i - l_{k_1} - l_{k_2} - l_{k_3} - 2 \cdot j_{sa}^s)!}{(n_i - n - l_{k_2} - l_{k_3} - \dots)!} \frac{1}{(2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!} \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_{sa} \leq l \wedge l_s \leq D - n - 2 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_{sa} + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{lk} + 1 = l_{sa} - j_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$D + j_{sa} - l_{sa} \leq l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$

$l_{sa} \geq n - l_{sa} \wedge I = l_k > 0 \wedge$

$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, \dots, l_{k_2}, j_{sa}, \dots, l_{k_3}, j_{sa}^i\} \wedge$

$s \geq 7 \wedge s = s + l_k \wedge$

$$l_{k_2}: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$f_{z^S} S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(\quad)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{sa}+n+j_{sa}^{ik}-D-j_{sa}-1} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{(\quad)}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\dots}^{n_{is}+j_s-k-k_1} \dots$$

$$\frac{(n_i - n_{is})}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - \dots - k_1 - 1)!}{(j_{ik} - \dots - 1)! \cdot (n_{ik} + j_s - n_{ik} - j_{ik} - k_1)!}$$

$$\frac{\dots - 1 - k_2 - 1)!}{(j^{sa} - \dots - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!}$$

$$\frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - \dots - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=l}^{(\quad)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)}$$

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$$\begin{aligned}
 & \sum_{j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa}}^{l_{ik}-l+1} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_{sa}-l+1)} \sum_{j_i=j_{sa}+s-j_{sa}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k+l_{k_2}+l_{k_3}-j_{i-1}}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n+l_{k_3}-j_{sa}+1)}^{(n_{ik}+j_{ik}-j_{sa}-l_{k_2})} \sum_{n_s=j_i+1}^{n_{sa}+j_{sa}-j_i-1} \\
 & \frac{(n_i-1)!}{(j_s-2)!(n_i-n_{is}+1)!} \cdot \\
 & \frac{(n_i-n_{ik}-l_{k_1}-1)!}{(j_{ik}-j_s-1)!(n_i-n_{is}-j_{ik}-l_{k_1})!} \cdot \\
 & \frac{(n_{ik}-n_s-l_{k_2}-1)!}{(j_{sa}-j_{ik}-1)!(n_{ik}+j_{sa}-n_{sa}-j_{sa}-l_{k_2})!} \cdot \\
 & \frac{(n_{sa}-n_s-l_{k_3}-1)!}{(j_i-j_{sa}-1)!(n_i+j_{sa}-n_s-j_i-l_{k_3})!} \cdot \\
 & \frac{(n_s-1)!}{(l_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \\
 & \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \cdot \\
 & \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(l_{ik}+l_{sa}-j_{sa}-l_{ik})! \cdot (j_{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} \cdot \\
 & \sum_{k=l}^{\binom{(\cdot)}{}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\binom{(\cdot)}{}}
 \end{aligned}$$

$$\begin{aligned}
 & \sum_{j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa}}^{l_{ik}-l+1} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{\binom{(\cdot)}{}} \sum_{j_i=j_{sa}+s-j_{sa}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}}
 \end{aligned}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3} (n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^s)! / (n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!$$

$$\frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{(l_s - l + 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - 1)!}{(D + j_{sa} - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa}^{ik} + j_{sa}^{ik} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} - l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa}^{ik} - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa} < j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^s\} \wedge$$

$$s \geq 7 \wedge s = s - \mathbb{k} \wedge$$

$$\mathbb{k}_z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3$$

$$f_z^{S_{j_s, j_{ik}, j^{sa}, j_i}} = \sum_{k=l}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{sa}+n+j_{sa}^{ik}-D-j_{sa}-1} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\frac{\sum_{(n_{sa}=n+k_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-k_3}}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{ik} - k_2)!}$$

$$\frac{(n_{sa} - n_{is} - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!}$$

$$\frac{(n_s - 1)!}{(n - j_i - 1)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - l_{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=l}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa}}^{l_s+j_{sa}^{ik}-l} \sum_{(l_{sa}-l+1)}^{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n+k_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-k_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

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$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - 1)!}{(j_{ik} + l_{sa} - j^{sa})! \cdot (j^{sa} + j_s - j_{ik} - j_{sa})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)}$$

$$\sum_{k=l_{sa}+n+1}^{(\cdot)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{(\cdot)} \sum_{j_i=j^{sa}+s-j_{sa}}^{(\cdot)}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\cdot)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}$$

$$\frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

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$$D \geq n < n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$\begin{aligned} & \sum_{j_s=2}^{(l_{sa} + D - j_{sa})} \sum_{j_i=j_{sa}+s-j_{sa}}^{(j_{sa}^{ik} - j_{sa} + 1)} \sum_{j_{ik}=j_s+j_{sa}-1}^{(n_i - j_s + 1)} \sum_{n_{is}=n+k-j_s+1}^{(n_{is} + j_s - j_{ik} - k_1)} \sum_{n_{sa}=n+k_3-j_{sa}+1}^{(n_{ik} + j_{ik} - j_{sa} - k_2)} \sum_{n_s=n-j_i+1}^{(n_{sa} + j_{sa} - j_i - k_3)} \\ & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \end{aligned}$$

$$\begin{aligned}
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=l_{sa}+n-j_{sa}+1}^{(l_{ik}-j_{sa}^{ik}+2)} \frac{(l_{ik}-j_{sa}^{ik}+2)!}{(l_{sa}+n-j_{sa}+1)!} \cdot \\
 & \sum_{j_{ik}=j_s+j_{sa}^{ik}}^{(l_s-l+1)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_s}^{(l_s-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{(l_s-l+1)} \frac{(l_s-l+1)!}{(j_{ik}-j_s-j_{sa}^{ik})! \cdot (j_{sa}-j_{sa}^{ik})! \cdot (j_i-j^{sa}-s+j_{sa})!} \cdot \\
 & \sum_{n_i=n+k}^{(n_i-l+1)} \sum_{n_{sa}=n+k-j_s+l_{sa}-j_{sa}^{ik}}^{(n_i-l+1)} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{(n_i-l+1)} \frac{(n_i-l+1)!}{(n_i-k)! \cdot (n_{sa}-k-j_s+l_{sa}-j_{sa}^{ik})! \cdot (n_{ik}-k_2-k_3-j_{ik}+1)!} \cdot \\
 & \sum_{(n_{sa}=k_3-j^{sa}+1)}^{(n_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{(n_{sa}+j^{sa}-j_i-k_3)} \frac{(n_{ik}-j^{sa}-k_2)! \cdot (n_{sa}+j^{sa}-j_i-k_3)!}{(n_{sa}=k_3-j^{sa}+1)! \cdot (n_s=n-j_i+1)!} \cdot \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(n_{is} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot
 \end{aligned}$$

GÜLDÜZYA

$$\sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_{ik}-l-j_{sa}^{ik}+2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{lk}-1}^{()} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j_{sa}+s-j_{sa}^{ik}}^{()}$$

$$\sum_{n_i=n+lk}^n \sum_{(n_{is}=n+lk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}-j_{ik}-lk_1}^{()}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-lk_2)}^{()} \sum_{(n_{sa}+j_{sa}-j_i)}^{()}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j_{sa}^{lk_2} - lk_2 - j_{sa} - 2 \cdot j_{sa}^s)!}{(n_i + 2 \cdot j_s + j_{sa} - j_{sa}^{lk_2} - lk_2 - j_{sa} - 2 \cdot j_{sa}^s)!}$$

$$\frac{1}{(n + 2 \cdot j_s + j_{sa} - j_{sa}^{lk_2} - lk_2 - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq 1 \wedge l_s \leq D - n - 1 \wedge$$

$$1 < j_s \leq j_{ik} + j_{sa}^{ik} + 1 \wedge j_{sa}^{ik} + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - j_{sa}^{ik} \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{lk} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n - l_{sa} \leq D - l_s + j_{sa} - n - 1 \wedge$$

$$D > n - n \wedge I = lk > 0 \wedge$$

$$j_{sa} < j_{sa}^i \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s \cdot \{j_{sa}^{lk_1}, lk_1, j_{sa}^{lk_2}, \dots, lk_2, j_{sa}, \dots, lk_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + lk \wedge$$

$$lk_z: z = 3 \wedge lk = lk_1 + lk_2 + lk_3 \Rightarrow$$

$$\begin{aligned}
 f_{zS} S_{j_s, j_{ik}, j^{sa}, j_i} &= \sum_{k=l}^{(l_{sa}+n-D-j_{sa})} \sum_{(j_s=2)} \\
 &\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(l_{sa}-l+1)} \sum_{(j^{sa}=l_{sa}+n-D)} \sum_{j_i=j^{sa}+s-j} \\
 &\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2-j_{ik}+1}^{(n_{is}+j_s-j_{ik}-k_1)} \\
 &\sum_{(n_{ik}+j_{ik}-j^{sa})} \sum_{(n_{sa}+j_s-j_i-k_3)} \\
 &\sum_{(n_{sa}=n+k_3-j_{ik}+1)} \sum_{n_s=n-j_i} \\
 &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_{is} + j_s - 1)!} \\
 &\frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \\
 &\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \\
 &\frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!} \\
 &\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 &\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \\
 &\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \\
 &\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 &\sum_{k=l}^{(l_s-l-1)} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_s-l-1)} \\
 &\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(l_{sa}-l+1)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+s-j_{sa}}
 \end{aligned}$$

GÜLDÜZ

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{i_k}=n+l_{k_2}+l_{k_3}-j_{i_k}+1}^{n_{i_s}+j_s-j_{i_k}-l_{k_1}} \\
 & \sum_{(n_{s_a}=n+l_{k_3}-j^{s_a}+1)}^{(n_{i_k}+j_{i_k}-j^{s_a}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{s_a}+j^{s_a}-j_i-l_{k_3}} \\
 & \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \\
 & \frac{(n_{i_s} - n_{i_k} - l_{k_1} - 1)!}{(j_{i_k} - j_s - 1)! \cdot (n_{i_s} + j_s - j_{i_k} - l_{k_1})!} \cdot \\
 & \frac{(n_{i_k} - n_{s_a} - 1)!}{(j^{s_a} - j_{i_k} - 1)! \cdot (n_{i_k} + j_{i_k} - n_{s_a} - j^{s_a} - l_{k_2})!} \cdot \\
 & \frac{(n_{s_a} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{i_s} + j^{s_a} - n_s - l_{k_3})!} \cdot \\
 & \frac{(n_s - 1)!}{(n_i + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{s_a} + j_{s_a}^{i_k} - l_{i_k} - j_{s_a})!}{(j_{i_k} + l_{s_a})^{j^{s_a} - l_{i_k}} \cdot (j^{s_a} + j_{s_a}^{i_k} - j_{i_k} - j_{s_a})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=l}^{(l_s-l-1)} \sum_{(j_s=l_{s_a}+n-D-j_{s_a}+1)}^{(l_s-l-1)} \\
 & \sum_{j_{i_k}=j_s+j_{s_a}^{i_k}-1}^{()} \sum_{(j^{s_a}=j_{i_k}+j_{s_a}-j_{s_a}^{i_k})}^{()} \sum_{j_i=j^{s_a}+s-j_{s_a}}^{()} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{i_k}=n_{i_s}+j_s-j_{i_k}-l_{k_1}}^{()} \\
 & \sum_{(n_{s_a}=n_{i_k}+j_{i_k}-j^{s_a}-l_{k_2})}^{()} \sum_{n_s=n_{s_a}+j^{s_a}-j_i-l_{k_3}}^{()}
 \end{aligned}$$

GÜLDÜSÜMÜSÜ

$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^i)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}$$

$$\frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!}$$

$$\frac{(D - l)!}{(D + j_i - n - l_i)! (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$D + l_s + s - n - l_i + 1 \leq l \leq i \wedge l - 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i - n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} \wedge j_{sa}^s < j_{sa}^{ik} \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k}$$

$$\mathbb{k}_2 = 3 \wedge \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}-l+1} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\cdot)} \sum_{j_i=l_i+n-D}^{l_i-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2 - 1)!} \cdot \\
 & \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
 & \frac{(n_s + j_i - n - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(n_s - l - 1)!}{(n_s - l - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j^{sa} - l_{ik} - j^{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (l_{sa} + j^{sa} - j_{ik} - j^{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=l}^{(\quad)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)} \\
 & \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\quad)} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\quad)} \sum_{j_i=l_i+n-D}^{l_{ik}+s-l-j_{sa}^{ik}+1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \\
 & \frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!} \cdot \\
 & \frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot
 \end{aligned}$$

GÜLDENWA

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$D + l_s + s - n - l_i + 1 \leq l \leq i - 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_i^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$f^{z^s} j_s j_{ik} j_{sa} j_i = \sum_{k=l} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{()} \sum_{j_i=l_i+n-D}^{l_i-l+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n+k_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-k_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_s}^{(n_i-1)} \sum_{j_{sa}=j_i+j_{sa}-s}^{l_s+s-l} \sum_{j_i=l_i+n-D}^{(n_i-1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(n_i-1)} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}^{(n_i-1)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}^{(n_i-1)} \frac{(n_i + j_s + j_{sa} - j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!} \cdot \frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$D + l_s + s - n - l_i + 1 \leq l \leq i - 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$fz^s = \sum_{i_{ik}=j_{sa}^{ik}+1}^{l_{ik}-l_i} \sum_{j_{sa}^{ik}=j_{sa}^{ik}+1}^{(l_{sa}-1)} \sum_{j_i=j_{sa}^i+s-j_{sa}}^{(j_{sa}-j_{sa}^{ik}+1)} \sum_{n+k}^{(n_i-j_s)} \sum_{(n_{is}=n+k-j_s+1)}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_{sa}=n+k_3-j_{sa}+1)}^{n_{sa}+j_{sa}-j_i-k_3} \sum_{n_s=n-j_i+1}^{(n_{ik}+j_{ik}-j_{sa}-k_2)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

GÜLDÜMÜNYA

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(l_{ik}+j_{sa}-l-j_{sa}^{ik}+1)} \sum_{(j^{sa}=l_i+n-j_{sa}-D-s)}^{(j_{sa}-D-s)}$$

$$\sum_{n_i=n+k}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_i-k-j_{ik}-k_1)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{sa}-k_2)}^{()} \sum_{(n_{sa}+j^{sa}-j_i-k_3)}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - k_2 - k_3 - 2 \cdot j_{sa}^s)!}{(n_i - k_1 - k_2 - k_3)!}$$

$$\frac{1}{n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s}!$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\geq n < n \wedge l \neq i \wedge l \leq D - n + 1 \wedge$$

$$D + l + s - n - 1 \leq l \leq i - 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$+ j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$fz S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}-l+1} \sum_{(j_{sa}^{ik}=l_i+n+j_{sa}^{ik}-j_{ik})}^{(l_i+j_{sa}-l-s+1)} \sum_{(i=j_s-j_{sa}^{ik}-j_{sa})}^{(\cdot)}$$

$$\sum_{n_i=n+k}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{is}+j_s-j_{ik})}^{(n_{is}+j_s-j_{ik})}$$

$$\sum_{(n_{ik}=n_{sa}+k_3-j_{ik}+1)}^{(n_{ik}=n_{sa}+k_3-j_{ik}+1)} \sum_{(n_{ik}-j_{sa}-k_2)}^{(n_{ik}-j_{sa}-k_2)}$$

$$\sum_{(n_s=n-j_i+1)}^{(n_s=n-j_i+1)} \sum_{(n_s=n-j_i+1)}^{(n_s=n-j_i+1)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{ik} - k_1 - 1)!}{(j_{ik} - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(n_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!}$$

$$\frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i - k_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa}^{ik} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{lk}-D-s}^{l_{ik}-l+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\cdot)} \sum_{j_i=j^{sa}+s-j_{sa}^{ik}}^{(\cdot)}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} n_{ik}=n_{is}+j_{ik}-k_1$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{(\cdot)} \sum_{(n_{sa}+j^{sa}-j_i)}^{(\cdot)}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - k_2 - j_i - 2 \cdot j_{sa}^s)!}{(n_i + k_1 + k_2 - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq 1 \wedge l_s \leq D - n - 1 \wedge$$

$$D + l_s + s - j_{sa} - l_i + 1 < l \leq l - 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{lk} - 1 \wedge j_s + j_{sa}^{lk} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa}^{ik} \leq j^{sa} \leq j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{ik} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D - l_s - 1 < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} - j_{sa} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$fzS_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=2)}^{(l_{ik}-l-j_{sa}^{ik}+2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(l_i+j_{sa}-l-s+1)} \sum_{(j_{sa}=l_i+n+j_{sa}-D-s)}^{(l_i+j_{sa}-l-s+1)} \sum_{j_i=j_{sa}+s-j_{ik}}^{(l_i+j_{sa}-l-s+1)}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k-j_{ik}+1}^{(n_i-j_s+1)} \sum_{n_{is}+j_s-j_{ik}-l_{k_1}}^{(n_i-j_s+1)}$$

$$\sum_{(n_{sa}=n+l_{k_3}-j_{ik}-1)}^{(n_{ik}+j_{ik}-j_{sa}^{ik}+j_{ik}-l_{k_3})} \sum_{n_s=n-j_i+l_{k_3}}^{(n_{ik}+j_{ik}-j_{sa}^{ik}+j_{ik}-l_{k_3})}$$

$$\frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_s - 2)! \cdot (n_i - n_{ik} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - l_{k_1})!}$$

$$\frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - l_{k_2})!}$$

$$\frac{(n_{sa} - n_s - l_{k_3} - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i - l_{k_3})!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{ik}-l-j_{sa}^{ik}+2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{()} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j_{sa}+s-j_{sa}}^{()}$$

GÜLDÜZ

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$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3} \frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - k_1 - k_2 - k_3 - 2 \cdot j_s)!}{(n_i - n - k_1 - k_2 - k_3)!} \cdot \frac{1}{(n + 2 \cdot j_s + j_{sa} - j_i - 2 \cdot j_s^s)!} \cdot \frac{(l_i - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!} \cdot \frac{(D - n)!}{(D - j_i - n - j_i)!}$$

$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$
 $D + l_s + s - n - l_i + 1 \leq l \leq i \wedge l - 1 \wedge$
 $1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} + j_{sa}^{ik} - 1 \wedge$
 $j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + j_{sa} \leq j_i \leq n \wedge$
 $l_{ik} - j_{sa}^{ik} + 1 = l \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_{sa} + j_{sa} - s = l_{sa} \wedge$
 $D + j_{sa} - n < l_{sa} \leq l + l_s + j_{sa} - n \wedge$
 $D \geq n < n \wedge l > 0 \wedge k > 0 \wedge$
 $j_{sa} < j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa} < j_{sa}^{ik} - 1 \wedge$
 $s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \dots, k_1, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$
 $s \geq 7 \wedge s = s + 1 \wedge$
 $k_z: z = 3 \wedge k_z = k_1 + k_2 + k_3 \Rightarrow$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()} \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}-l+1} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{()} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{sa}+s-l-j_{sa}+1}$$

$$\begin{aligned}
 & \sum_{n_i = n + k}^n \sum_{\substack{(n_i - j_s + 1) \\ (n_{i_s} = n + k - j_s + 1)}} \sum_{\substack{n_{i_s} + j_s - j_{ik} - k_1 \\ n_{ik} = n + k_2 + k_3 - j_{ik} + 1}} \\
 & \sum_{\substack{(n_{ik} + j_{ik} - j^{sa} - k_2) \\ (n_{sa} = n + k_3 - j^{sa} + 1)}} \sum_{\substack{n_{sa} + j^{sa} - j_i - k_3 \\ n_s = n - j_i + 1}} \\
 & \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \\
 & \frac{(n_{i_s} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{i_s} + j_s - j_{ik} - k_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - k_3)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_{sa} + j_i - n_s - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa})! \cdot j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

$$\sum_{k=l} \sum_{\binom{()}{j_s = j_{ik} - j_{sa}^{ik} + 1}}$$

$$\sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}} \sum_{\binom{()}{j^{sa} = j_i + j_{sa} - s}} \sum_{\substack{l_{ik} + s - l - j_{sa}^{ik} + 1 \\ j_i = l_{sa} + n + s - D - j_{sa}}}$$

$$\sum_{n_i = n + k}^n \sum_{\substack{(n_i - j_s + 1) \\ (n_{i_s} = n + k - j_s + 1)}} \sum_{n_{ik} = n_{i_s} + j_s - j_{ik} - k_1}$$

$$\sum_{\substack{() \\ (n_{sa} = n_{ik} + j_{ik} - j^{sa} - k_2)}} \sum_{n_s = n_{sa} + j^{sa} - j_i - k_3}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}$$

$$\frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!}$$

$$\frac{(D - l)!}{(D + j_i - n - l_i)! (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$D + l_s + s - n - l_i + 1 \leq l \leq i \wedge l - 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i - n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} \wedge j_{sa}^s < j_{sa}^{ik} \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k}$$

$$\mathbb{k}_2 = 3 \wedge \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=l} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{()} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{sa}+s-l-j_{sa}+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
 & \frac{(n_s + n - n - 1)!}{(n_s + n - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(n_s - l - 1)!}{(n_s - l - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j^{sa} - l_{ik} - j^{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (l_{sa} + j^{sa} - j_{ik} - j^{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + n - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)} \\
 & \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\cdot)} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\cdot)} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_s+s-l} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\cdot)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \\
 & \frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!} \cdot \\
 & \frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}
 \end{aligned}$$

GÜLDÜZMAYA

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$D + l_s + s - n - l_i + 1 \leq l \leq i - 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$f^{z^s} j_s j_{ik} j_{sa} j_i = \sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}-l+1} \sum_{(j_{sa}=l_{sa}+n-D)}^{(l_{sa}-l+1)} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n+k_3-j_{sa}+1)}^{(n_{ik}+j_{ik}-j_{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j_{sa}-j_i-k_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(l_{ik}+j_{sa}+j_{sa}^{ik+1})} \sum_{j_i=j^{sa}+s-j_{sa}}^{(j_s - j_{sa}^{ik+1})} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(n_i-1)} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}^{(n_{is}=n+\mathbb{k}-j_s+1)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}^{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \frac{(n_i + j_s + j_{sa} - j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!} \cdot \frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

$$D + l_s + s - n - l_i + 1 \leq l \leq i \wedge l - 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$\begin{aligned} & f z^{\dots} = \sum_{j_{ik}=j_{sa}^{ik}+1}^{(n_i-j_s)} \sum_{n_{is}=n+\mathbb{k}-j_s+1}^{(n_i-j_s)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\ & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \end{aligned}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()} \sum_{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}^{(l_s+j_{sa}-l)} \sum_{(j_{sa}=l_{sa}+n-l)}^{()} \sum_{(n_i=n+k)}^n \sum_{(n_i=n+k)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n+k)}^{()} \sum_{(n_{sa}=n_{ik}+j_{sa}-k_2)}^{()} \sum_{(n_{sa}+j_{sa}-j_i-k_3)}^{()} \frac{(n_i + 2 \cdot j_s + j_{sa} - j_{sa} - j_i - k_2 - k_3 - 2 \cdot j_{sa}^s)!}{(n_i - k_1 - k_2 - k_3)!} \cdot \frac{1}{(n + 2 \cdot j_s + j_{sa} - j_{sa} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l \leq D - n + 1 \wedge$$

$$D + l + s - n < l \leq l \leq i - 1 \wedge$$

$$1 \leq j_s \leq j_s - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{sa} + j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge I = k > 0 \wedge$$

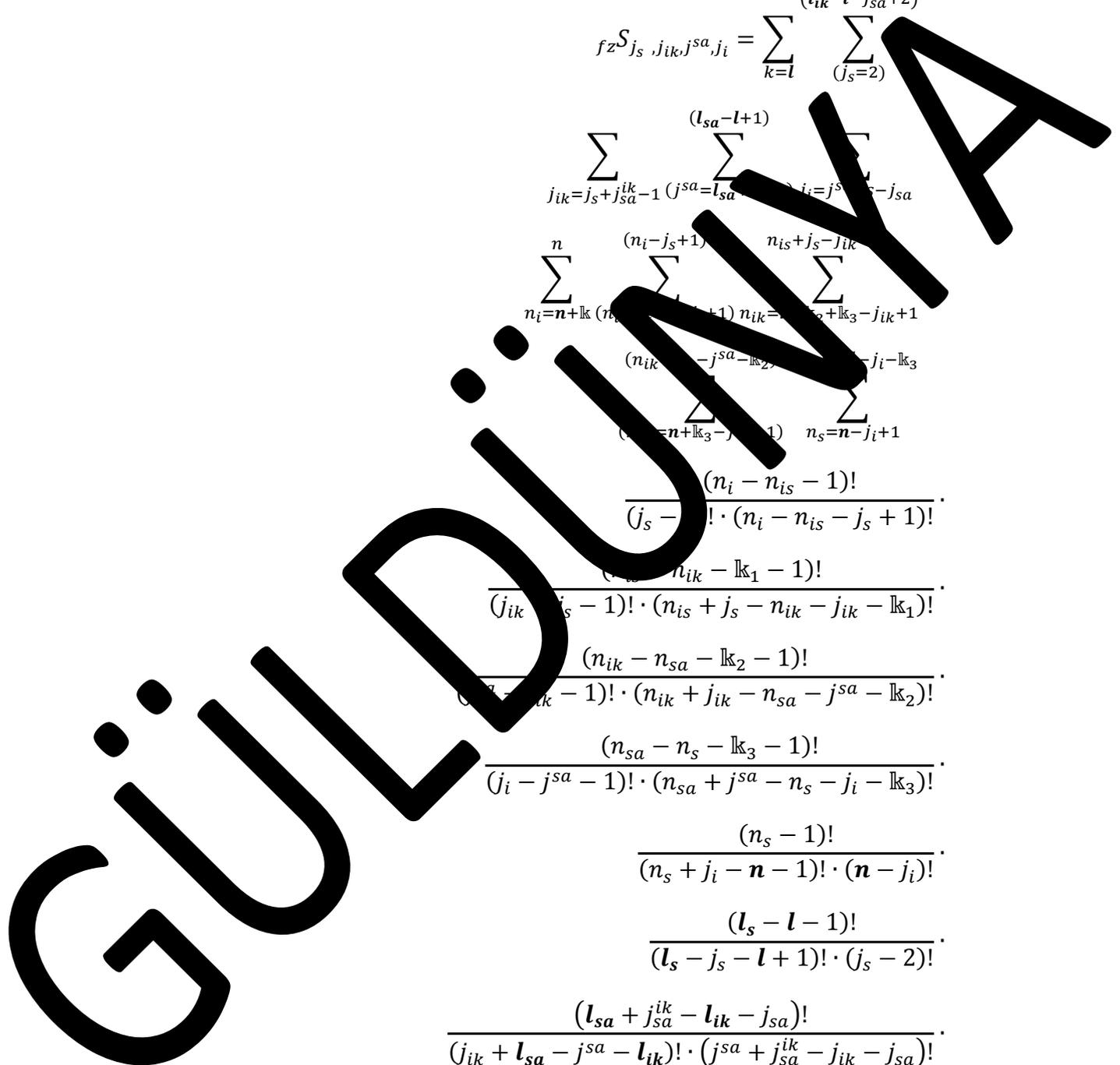
$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$fz S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=2)}^{(l_{sa}-l+1)} \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(l_{sa}-l+1)} \sum_{(j_{sa}=l_{sa}-j_{ik}-j_s)}^{(l_{sa}-l+1)} \sum_{i=j_s+j_{sa}-j_{sa}}^{(l_{sa}-l+1)} \sum_{n_i=n+k}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{is}=n_{is}+j_s-j_{ik}}^{(n_{is}+j_s-j_{ik})} \sum_{(n_{ik}=n_{sa}+k_3-j_{ik}+1)}^{(n_{ik}=n_{sa}+k_3-j_{ik}+1)} \sum_{(n_{ik}-j_{sa}-k_2)}^{(n_{ik}-j_{sa}-k_2)} \sum_{(j_i-k_3)}^{(j_i-k_3)} \sum_{(n_s=n+k_3-j_i+1)}^{(n_s=n+k_3-j_i+1)} \sum_{(n_s=n-j_i+1)}^{(n_s=n-j_i+1)} \frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{ik} - k_1 - 1)!}{(j_{ik} - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!} \cdot \frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i - k_3)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$



$$\sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_{ik}-l-j_{sa}^{ik}+2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{lk}-1}^{()} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j_{sa}+s-j_{sa}^{ik}}^{()}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}-j_{ik}-l_{k_1}}^{()}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-l_{k_2})}^{()} \sum_{(n_{sa}=n_{sa}+j_{sa}-j_i)}^{()}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j_{sa}^{lk} - l_{k_2} - j_{sa} - 2 \cdot j_{sa}^s)!}{(n_i + 2 \cdot j_s + j_{sa} - j_{sa}^{lk} - l_{k_2} - j_{sa} - 2 \cdot j_{sa}^s)!}$$

$$\frac{1}{(n + 2 \cdot j_s + j_{sa} - j_{sa}^{lk} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq 1 \wedge l_i \leq D + s - n \wedge$$

$$1 < j_s \leq j_{ik} + j_{sa}^{ik} + 1 \wedge j_{sa} + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{lk} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge l = l_k >$$

$$j_s < j_{sa} - 1 \wedge j_{sa}^{lk} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{lk}, j_{sa}^{ik}, \dots, l_{k_2}, j_{sa}, \dots, l_{k_3}, j_{sa}^l\} \wedge$$

$$s \geq 1 \wedge s = s + l_k \wedge$$

$$l_{k_z}: z = 3 \wedge l_k = l_{k_1} + l_{k_2} + l_{k_3} \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=l}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\begin{aligned}
 & \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{\binom{(\cdot)}{j^{sa}=j_i+j_{sa}-s}} \sum_{j_i=s+1}^{l_s+s-l} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{\binom{(n_i-j_s+1)}{n_{is}=n+\mathbb{k}-j_s+1}} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \sum_{\binom{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}{n_{sa}=n+\mathbb{k}_3-j^{sa}+1}} \sum_{\binom{(n_{sa}+j^{sa}-j_i-1)}{n_s=n-j_i+1}} \\
 & \frac{\binom{(n_i-1)}{(j_s-2)!} \cdot (n_i-n_{is}+1)!}{\binom{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!} \cdot (j_s-n_{is}-j_{ik}-\mathbb{k}_1)!} \\
 & \frac{\binom{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!} \cdot (n_{ik}+j_s-n_{sa}-j^{sa}-\mathbb{k}_2)!}{\binom{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-n_{sa}-1)! \cdot (n_{is}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}} \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \\
 & \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \\
 & \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} +
 \end{aligned}$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}$$

$$\begin{aligned}
 & \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{\binom{(\cdot)}{j^{sa}=j_i+j_{sa}-s}} \sum_{j_i=l_s+s-l+1}^{l_i-l+1} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{\binom{(n_i-j_s+1)}{n_{is}=n+\mathbb{k}-j_s+1}} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}
 \end{aligned}$$

$$\frac{\sum_{(n_{sa}=n+l_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-l_3}}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_i-n_{is}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-l_1)!} \cdot \frac{(n_{is}-n_{ik}-l_1-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j_i-l_2-l_3)!} \cdot \frac{(n_{ik}-n_{sa}-l_2-1)!}{(j_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-l_3-l_1)!} \cdot \frac{(n_{sa}-n_{is}-l_3-1)!}{(n_s-1)!} \cdot \frac{(n_s-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \cdot \frac{(l_s-l-1)!}{(j_s+l_{ik}-j_{ik}-l_1-l_2-l_3-l+1)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \cdot \frac{(l_{ik}-j_{sa}^{ik}+1)!}{(D-l_i)!} \cdot \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!}$$

$$\sum_{k=l}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{()} \sum_{(j^{sa}=j_i+j_{sa}-j)}^{()} \sum_{j_i=s+1}^{l_s+s-l}$$

$$\sum_{n_i=n+l_1}^n \sum_{(n_{is}=n+l_1-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-l_3}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - l_1 - l_2 - l_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - l_1 - l_2 - l_3)!}$$

$$\frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - l_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^i < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fz_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)} \sum_{j_{ik}=j^{sa} + j_{sa}^{ik} - j_{sa}}^{(l_s + j_{sa} - l)} \sum_{(j^{sa}=j_{sa}+1)} \sum_{j_i=j^{sa} + s - j_{sa}} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i - j_s + 1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa} + j^{sa} - j_i - \mathbb{k}_3} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\begin{aligned}
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j^{sa} - 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - l + 1)!} \cdot \\
 & \frac{(n - l_i)!}{(n - j_i)! \cdot (n - j_i)!} \cdot \sum_{k=l}^{-l+1} \sum_{(j_s=2)}^{-l+1} \\
 & \sum_{j_i=j^{sa}+j_s}^{-l+1} \sum_{(n_{is}=n+\mathbb{k}_3-j_s+1)}^{-l+1} \sum_{(n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1)}^{-l+1} \sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{-l+1} \sum_{(n_s=n-j_i+1)}^{-l+1} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot
 \end{aligned}$$

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$$\begin{aligned}
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{k=l}^{(\quad)} \sum_{j_s=j_{ik}^{ik}+1}^{(\quad)} \sum_{j_{sa}=j_{sa}^{sa}-l}^{(\quad)} \sum_{j_i=j_{sa}^{sa}+s-j_{sa}}^{(\quad)} \sum_{n_i=n+l_k}^{(\quad)} \sum_{n_i=n+l_k-j_s}^{(\quad)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}}^{(\quad)} \sum_{n_s=n_{sa}+j_{sa}^{sa}-j_i-l_{k_3}}^{(\quad)} \\
& \frac{(n_i + 2 \cdot j_s + j_{sa} - j_{sa} - j_i - l_{k_1} - l_{k_2} - l_{k_3} - 2 \cdot j_{sa}^s)!}{(n_i + n - l_{k_1} - l_{k_2} - l_{k_3})!} \cdot \\
& \frac{1}{(n + 2 \cdot j_s + j_{sa} - j_{sa} - j_i - 2 \cdot j_{sa}^s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
\end{aligned}$$

$$D > n < n \wedge l \neq i \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} - j_{sa}^{ik} - j_{sa} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$fz S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=l}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-l} \sum_{(j_{sa}=j_{ik}+j_{sa})}^{(j_{sa}=j_{ik}+j_{sa})} \sum_{(j_{sa}=j_{ik}+j_{sa})}^{(j_{sa}=j_{ik}+j_{sa})}$$

$$\sum_{n_i=n+l}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{is}+j_s-j_{ik})}^{(n_{is}+j_s-j_{ik})}$$

$$\sum_{(n_{ik}+j_{sa}-k_2)}^{(n_{ik}+j_{sa}-k_2)} \sum_{(n_s=n-j_i+1)}^{(n_s=n-j_i+1)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!}$$

$$\frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i - k_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\begin{aligned}
 & \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)} \\
 & \sum_{j_{ik}=l_s+j_{sa}^{ik}-l+1}^{l_{ik}-l+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j^{sa}+s-j} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \frac{(n_{ik}+j_{ik}-j^{sa})! \cdot (n_{sa}+j_{ik}-j_i-l_{k_3})!}{(n_{sa}=n+l_{k_3}-j_{ik}+1)! \cdot (n_s=n-j_i)!} \\
 & \frac{(n_i-n_{k_1}-1)!}{(j_s-2)! \cdot (n_{is}+j_s+1)!} \\
 & \frac{(n_{is}-n_{ik}-l_{k_1}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-l_{k_1})!} \\
 & \frac{(n_{ik}-n_s-l_{k_2}-1)!}{(n_{sa}-j_{ik}-1)! \cdot (n_{ik}-j_{ik}-n_{sa}-j^{sa}-l_{k_2})!} \\
 & \frac{(n_{sa}-n_s-l_{k_3}-1)!}{(j_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-l_{k_3})!} \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \\
 & \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \\
 & \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} \\
 & \sum_{k=l} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()} \\
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j^{sa}+s-j_{sa}}
 \end{aligned}$$

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$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3} (n_i+2 \cdot j_s+j_{sa}-j^{sa}-j_i-k_1-k_2-k_3-2 \cdot j_s)! \cdot \frac{1}{(n_i-n-k_1-k_2-k_3)!} \cdot \frac{1}{(n+2 \cdot j_s+j_{sa}-j_i-k_1-k_2-k_3-j_s^s)!} \cdot \frac{(l_i-l-1)!}{(l_s-j_s-k_1+1)! \cdot (j_s-k_2-k_3)!} \cdot \frac{(D-n)!}{(D-j_i-n-k_1-k_2-k_3-n-j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} < j^{sa} + j_{sa}^{ik} - j_i \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa}^{ik} + s - j_i \leq j_i \leq j_{ik} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa} - j_{sa} = l_{ik} \wedge l_{sa} + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^s, \dots, k_2, j_{sa}^s, \dots, k_3, \dots\} \wedge$$

$$s \geq 1 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$f^z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{l_{ik}-l+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n+k_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-k_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1 - 1)!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{ik} - k_2 - 1)!}$$

$$\frac{(n_{sa} - n_{ik} - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3 - 1)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - j_{ik} - j_{sa}^{ik} + 1)!}{(j_s + j_{ik} - j_{ik} - l_{ik} - 1)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - k_1 - k_2 - k_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - k_1 - k_2 - k_3)!}$$

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$$\frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - l_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + \dots \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)} \sum_{j_{ik}=j^{sa} + j_{sa}^{ik} - j_{sa}}^{(j^{sa} = j_i + j_{sa} - s)} \sum_{(j_i = l_i + n - D)}^{(l_s + s - l)} \sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n + k_2 + k_3 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - k_1} \sum_{(n_{sa} = n + k_3 - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - k_2)} \sum_{n_s = n - j_i + 1}^{n_{sa} + j^{sa} - j_i - k_3} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\begin{aligned}
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l - 1)!}{(l_s - j_i - l + 1)! \cdot (l - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j^{sa} + 1)!}{(j_s + l_{ik} - j^{sa} - 1)! \cdot (j_{ik} - j^{sa} - j^{sa} + 1)!} \cdot \\
 & \frac{(D - l_s)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{(l_s - l + 1)} \sum_{(j_s=2)}^{(l_s - l + 1)} \\
 & \sum_{j_i}^{(j_i)} \sum_{(j^{sa} = j_i + j_{sa} - s)}^{(j^{sa} = j_i + j_{sa} - s)} \sum_{j_i = l_s + s - l + 1}^{(l_i - l + 1)} \\
 & \sum_{n_i = n + \mathbb{k}_1}^n \sum_{(n_{is} = n + \mathbb{k}_1 - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \\
 & \sum_{(n_{sa} = n + \mathbb{k}_3 - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = n - j_i + 1}^{n_{sa} + j^{sa} - j_i - \mathbb{k}_3} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot
 \end{aligned}$$

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$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{l=1}^{l_s+s-l} \sum_{j_s=j_{ik}-j_{sa}^{ik}}^{j_i+j_{sa}-s} \sum_{j_{ik}=j_s+j_{sa}^{ik}-j_{sa}^{ik}}^{j_i+j_{sa}-s} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-k_2}^{n_{is}+j_s-j_{ik}-k_1} \sum_{n_s=n_{sa}+j_{sa}^{ik}-j_i-k_3}^{n_{is}+j_s-j_{ik}-k_1} \frac{(n_i + j_s + j_{sa}^{ik} - j^{sa} - j_i - k_1 - k_2 - k_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - k_1 - k_2 - k_3)!} \cdot \frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

- $l_s \geq n - 1 \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$
- $1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$
- $j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$
- $l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$
- $D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=1}^{(l_s + j_{sa} - 1)} \sum_{i=2}^{(k - j_{sa} + 1)} \sum_{j_{ik} = j_{sa} + j_{sa}^{ik} - j_{sa}}^{(l_s + j_{sa} - 1)} \sum_{i = j_{sa} + s - j_{sa}}^{(n + j_{sa} - D)} \sum_{n_i = n + \mathbb{k}}^{(n_i - \mathbb{k}_1 + 1)} \sum_{n_{is} = n + \mathbb{k} - j_s + 1}^{(n_{is} - \mathbb{k}_1 - 1)} \sum_{n_{ik} = n_{sa} + j_{sa} - j_i - \mathbb{k}_3}^{(n_{ik} - j_{sa} - \mathbb{k}_2)} \sum_{n_s = n - j_i + 1}^{(n_{sa} - \mathbb{k}_3 - j_{sa} + 1)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(n_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\begin{aligned}
 & \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}^{(l_s-l+1)} \\
 & \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(l_i+j_{sa}-l-s+1)} \sum_{(j^{sa}=l_s+j_{sa}-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n+l_{k_3}-j_{ik}+1)}^{(n_{ik}+j_{ik}-j^{sa})} \sum_{(n_s=n-j_i)}^{(n_{sa}+j_{ik}-j_i-l_{k_3})} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_s - 2)! \cdot (n_{is} - j_s + 1)!} \\
 & \frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - l_{k_1})!} \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \\
 & \frac{(n_{sa} - n_s - l_{k_3} - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - l_{k_3})!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \\
 & \sum_{k=l} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()} \\
 & \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(l_s+j_{sa}-l)} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)} \sum_{j_i=j^{sa}+s-j_{sa}}
 \end{aligned}$$

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$$\sum_{n_i=n+k}^n \sum_{(n_{i_s}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{i_s}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - k_1 - k_2 - k_3 - 2 \cdot j_s)!}{(n_i - n - k_1 - k_2 - k_3)!}$$

$$\frac{1}{(n + 2 \cdot j_s + j_{sa} - j_i - j^{sa} \cdot j_s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - 1)! \cdot (j_s - 1)!}$$

$$\frac{(D - 1)!}{(D - j_i - n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} < j^{sa} + j_{sa}^{ik} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa}^{ik} + s - 1 \leq j_i \leq j_{ik} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa} - j_{sa} = l_{ik} \wedge l_{sa} + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - 1 \wedge$$

$$D \geq n < n \wedge l = k = 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^i, \dots, k_1, j_{sa}^{ik}, \dots, j_{sa}^i, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s \leq s + k \wedge$$

$$k_z: z = 3 \wedge k = k_2 + k_3 \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{lk}-D-s}^{l_s+j_{sa}^{ik}-l} \sum_{()} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\begin{aligned}
 & \sum_{n_i = n + k}^n \sum_{\substack{(n_i - j_s + 1) \\ (n_{i_s} = n + k - j_s + 1)}} \sum_{\substack{n_{i_s} + j_s - j_{ik} - k_1 \\ n_{ik} = n + k_2 + k_3 - j_{ik} + 1}} \\
 & \sum_{\substack{(n_{ik} + j_{ik} - j^{sa} - k_2) \\ (n_{sa} = n + k_3 - j^{sa} + 1)}} \sum_{\substack{n_{sa} + j^{sa} - j_i - k_3 \\ n_s = n - j_i + 1}} \\
 & \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \\
 & \frac{(n_{i_s} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{i_s} + j_s - j_{ik} - k_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{sa} + j^{sa} - n_s - k_3)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s - j_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{(l_s - l + 1)} \sum_{(j_s = 2)}
 \end{aligned}$$

$$\sum_{j_{ik} = l_s + j_{sa}^{ik} - l + 1}^{l_i + j_{sa}^{ik} - l - s + 1} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})} \sum_{j_i = j^{sa} + s - j_{sa}}$$

$$\begin{aligned}
 & \sum_{n_i = n + k}^n \sum_{\substack{(n_i - j_s + 1) \\ (n_{i_s} = n + k - j_s + 1)}} \sum_{\substack{n_{i_s} + j_s - j_{ik} - k_1 \\ n_{ik} = n + k_2 + k_3 - j_{ik} + 1}} \\
 & \sum_{\substack{(n_{ik} + j_{ik} - j^{sa} - k_2) \\ (n_{sa} = n + k_3 - j^{sa} + 1)}} \sum_{\substack{n_{sa} + j^{sa} - j_i - k_3 \\ n_s = n - j_i + 1}}
 \end{aligned}$$

$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
 & \frac{(n_s + j_i - n - 1)!}{(n_s - j_i - 1)!} \cdot \\
 & \frac{(n_s - l - 1)!}{(j_s - l - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - j_{sa}^{ik} - 1)!}{(j_s + l_{ik} - l - 1)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=l}^{(\cdot)} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\cdot)} \\
 & \sum_{j_{ik} = l_i + n + j_{sa}^{ik} - D - s}^{l_s - k - l} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}^{(\cdot)} \sum_{j_i = j^{sa} + s - j_{sa}} \\
 & \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1} \\
 & \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\cdot)} \sum_{n_s = n_{sa} + j^{sa} - j_i - \mathbb{k}_3} \\
 & \frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!} \cdot \\
 & \frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot
 \end{aligned}$$

GÜLDENWA

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$f_z S_{j_s, j_{sa}, j_i} = \sum_{k=l}^{(l_i+n-D-s)} \sum_{(j_s=2)}^{(l_i+n-D-s)}$$

$$\sum_{(j_{ik}=l_i+1)}^{(l_i+n-D-s)} \sum_{(j_{sa}^{ik}=D-s)}^{(l_i+n-D-s)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_i+n-D-s)} \sum_{(j_i=j^{sa}+s-j_{sa})}^{(l_i+n-D-s)}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n+k_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-k_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot$$

GÜLDÜNYA

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(l_s - l)!}{(D + j_i - n - l_i)! \cdot (j_i - l)!} +$$

$$\sum_{k=0}^{(l_s - l + 1)} \sum_{l_i = D - s + 1}^{l_i + j_{sa}^{ik} - l - 1} \sum_{j_i = j_s + j_{sa}^{ik} - 1}^{j_s + j_{sa}^{ik} - 1} (j_s + j_{sa}^{ik} + j_{sa} - j_{sa}^{ik}) j_i = j^{sa} + s - j_{sa}$$

$$\sum_{j_i = n + \mathbb{k}_1}^{n_i - j_s} \sum_{n_{is} = n + \mathbb{k}_1 - j_s + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{n_{ik} = n + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1}$$

$$\sum_{(n_{sa} = n + \mathbb{k}_3 - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = n - j_i + 1}^{n_{sa} + j^{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

GUIDANCE

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_i+n-D-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{lk}-1}^{()} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{lk})} \sum_{(j_{sa}^{lk}=j_{sa}-j_{sa}^{lk})}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_i=n+l_k)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n+l_k+j_s-j_{ik}-l_{k1})}$$

$$\sum_{(n_{sa}=n_{ik}+j_{sa}-j_{sa}^{lk_2})}^{()} \sum_{(n_{sa}=n_{ik}+j_{sa}-j_{ik}-l_{k3})}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - l_{k_2} - l_{k_3} - 2 \cdot j_{sa}^s)!}{(n_i + n - l_{k_1} - l_{k_2} - l_{k_3})!}$$

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$$\frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n \wedge l \neq i \wedge l \leq D - n + 1 \wedge$$

$$D + l + s - n - 1 \leq l \leq i - 1 \wedge$$

$$1 \leq j_s \leq j_{sa} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{lk} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$f_z^S j_s, j_{ik}, j_{sa}, j_i = \sum_{k=l}^{(l_s-l+1)} \sum_{j_s=z}^{(l_s-l+1)}$$

$$\sum_{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}^{(l_i+j_{sa}-l-s+1)} \sum_{(j_{sa}=l_i+n+j_{sa})} \sum_{j_i=j_{sa}^{ik}-j_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{is}=n-j_s-j_{ik}}^{n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{ik}=n-k_2+k_3-j_{ik}+1)}^{(n_{ik}=n-k_2+k_3-j_{ik}+1)} \sum_{(n_{ik}-j_{sa}-k_2)}^{(n_{ik}-j_{sa}-k_2)}$$

$$\sum_{(n_s=n-k_3-j_i+1)}^{(n_s=n-k_3-j_i+1)} \sum_{n_s=n-j_i+1}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(n_{sa} - k_1 - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!}$$

$$\frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i - k_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

GÜLDENYA

$$\sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{lk}-j_{sa}}^{(l_s+j_{sa}-l)} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)}^{(l_s+j_{sa}-l)} \sum_{j_i=j^{sa}+s-j_{sa}}^{(\cdot)}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-k_1}^{(\cdot)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{(\cdot)} \sum_{(n_{sa}=n_{sa}+j^{sa}-j_i)}^{(\cdot)}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - k_2 - j_s - 2 \cdot j_{sa}^s)!}{(n_i + n - k_1 - k_2 - j_s - 2 \cdot j_{sa}^s)!} \cdot \frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq 1 \wedge l_s \leq D - n - 1 \wedge$$

$$1 < j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_i + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_i \leq j_i + j_{sa} - j_{sa} \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n - l_{sa} \leq D - l_s + j_{sa} - n - 1 \wedge$$

$$D > n \wedge I = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s \in \{j_{sa}^i, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$\begin{aligned}
 f_{z^S} S_{j_s, j_{ik}, j^{sa}, j_i} &= \sum_{k=l}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)} \\
 &\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(j_s)} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(j_s)} \sum_{j_i=l_{sa}+n+s-D-j_{ik}}^{l_s+s-l} \\
 &\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 &\frac{(n_{ik}+j_{ik}-j^{sa})! \cdot (n_{sa}+j^{sa}-n_{is}-j_i-l_{k_3})!}{(n_{sa}=n+l_{k_3}-j^{sa}-1)! \cdot (n_s=n-j_i+l_{k_3}-j^{sa}-1)!} \\
 &\frac{(n_i-n_{ik}-1)!}{(j_s-2)! \cdot (n_{is}-n_{ik}-j_s+1)!} \\
 &\frac{(n_{is}-n_{ik}-l_{k_1}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-l_{k_1})!} \\
 &\frac{(n_{ik}-n_{sa}-l_{k_2}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}-j_{ik}-n_{sa}-j^{sa}-l_{k_2})!} \\
 &\frac{(n_{sa}-n_s-l_{k_3}-1)!}{(j_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-l_{k_3})!} \\
 &\frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \\
 &\frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \\
 &\frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \\
 &\frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \\
 &\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}^{(l_s-l+1)} \\
 &\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(j_s)} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(j_s)} \sum_{j_i=l_s+s-l+1}^{l_{sa}+s-l-j_{sa}+1}
 \end{aligned}$$

GÜLDENWA

$$\sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_s+1) \\ (n_{i_s}=n+l_k-j_s+1)}} \sum_{\substack{n_{i_s}+j_s-j_{ik}-l_{k_1} \\ n_{ik}=n+l_{k_2}+l_{k_3}-j_{ik}+1}} \\ \sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-l_{k_2}) \\ (n_{sa}=n+l_{k_3}-j^{sa}+1)}} \sum_{\substack{n_{sa}+j^{sa}-j_i-l_{k_3} \\ n_s=n-j_i+1}} \\ \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \\ \frac{(n_{i_s} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{i_s} + j_s - j_{ik} - l_{k_1})!} \cdot \\ \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\ \frac{(n_{sa} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{sa} + j^{sa} - n_s - l_{k_3})!} \cdot \\ \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\ \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\ \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s - j_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\ \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

$$\sum_{k=l} \sum_{\binom{()}{j_s=j_{ik}-j_{sa}^{ik}+1}}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{\binom{()}{j^{sa}=j_i+j_{sa}-s}} \sum_{\substack{l_s+s-l \\ j_i=l_{sa}+n+s-D-j_{sa}}}$$

$$\sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_s+1) \\ (n_{i_s}=n+l_k-j_s+1)}} \sum_{n_{ik}=n_{i_s}+j_s-j_{ik}-l_{k_1}}$$

$$\sum_{\binom{()}{n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2}}} \sum_{n_s=n_{sa}+j^{sa}-j_i-l_{k_3}}$$

GÜLDÜZMAYA

$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!} \cdot \frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!} \cdot \frac{(D - l)!}{(D + j_i - n - l_i)! (n - j_i)!}$$

$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa}^{sa}$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$

$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{sa} < j_{sa}^{ik} - 1$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 7 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 1, 2, 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$fz^S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(l_s+j_{sa}-l)} \sum_{(j^{sa}=l_{sa}+n-D)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
 & \frac{(n_s + \dots - n - 1)!}{(n_s + \dots - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(n_s - l - 1)!}{(n_s - l - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - l_s) \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D + l_i)!}{(D + \dots - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{(l_s - l + 1)} \sum_{(j_s=2)} \\
 & \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(l_{sa}-l+1)} \sum_{(j^{sa}=l_s+j_{sa}-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
 \end{aligned}$$

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$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 1)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{j_{sa} = j^{sa} + j_{sa}^{lk} - j_{sa}}^{(l_s - j_{sa} - l)} \sum_{j_{ik} = l_{sa} + n - D}^{(j_{sa} - j_{sa}^{lk} + 1)} \sum_{j_i = j^{sa} + s - j_{sa}}^{(n_i - 1)} \sum_{n_{is} = n + \mathbb{k} - j_s + 1}^{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}^{(n_s = n_{sa} + j^{sa} - j_i - \mathbb{k}_3)} \frac{(n_i + j_s + j_{sa} - j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!} \cdot \frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

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$$fz^S_{j_s, j_{ik}, j_{sa}^{ik}} = \sum_{l=1}^{k+1} \sum_{(j_s=2)}^{k+1}$$

$$\sum_{j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa}^{ik}}^{j_{sa}^{ik}-1} \sum_{(j_{sa}=j_{ik}+j_{sa}^{ik}-j_{sa}^{ik})}^{(j_{sa}=j_{ik}+j_{sa}^{ik}-j_{sa}^{ik})} \sum_{j_i=j_{sa}+s-j_{sa}}^{(j_i=j_{sa}+s-j_{sa})}$$

$$\sum_{n_i=n}^n \sum_{(n_{is}=n+k_1+1)}^{(n_i-1)} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n+k_3-j_{sa}+1)}^{(n_{ik}+j_{ik}-j_{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j_{sa}-j_i-k_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!}$$

$$\frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i - k_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=l}^{(l_s - l + 1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=l_s+j_{sa}^{ik}-l+1}^{l_{sa}+j_{sa}^{ik}-l-j_{sa}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa})} \dots$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s)}^{(n_i-j_s+1)} \sum_{(n_{is}+j_s-j_{ik}-l_k)} \dots$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - l_{k_1})!}$$

$$\frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!}$$

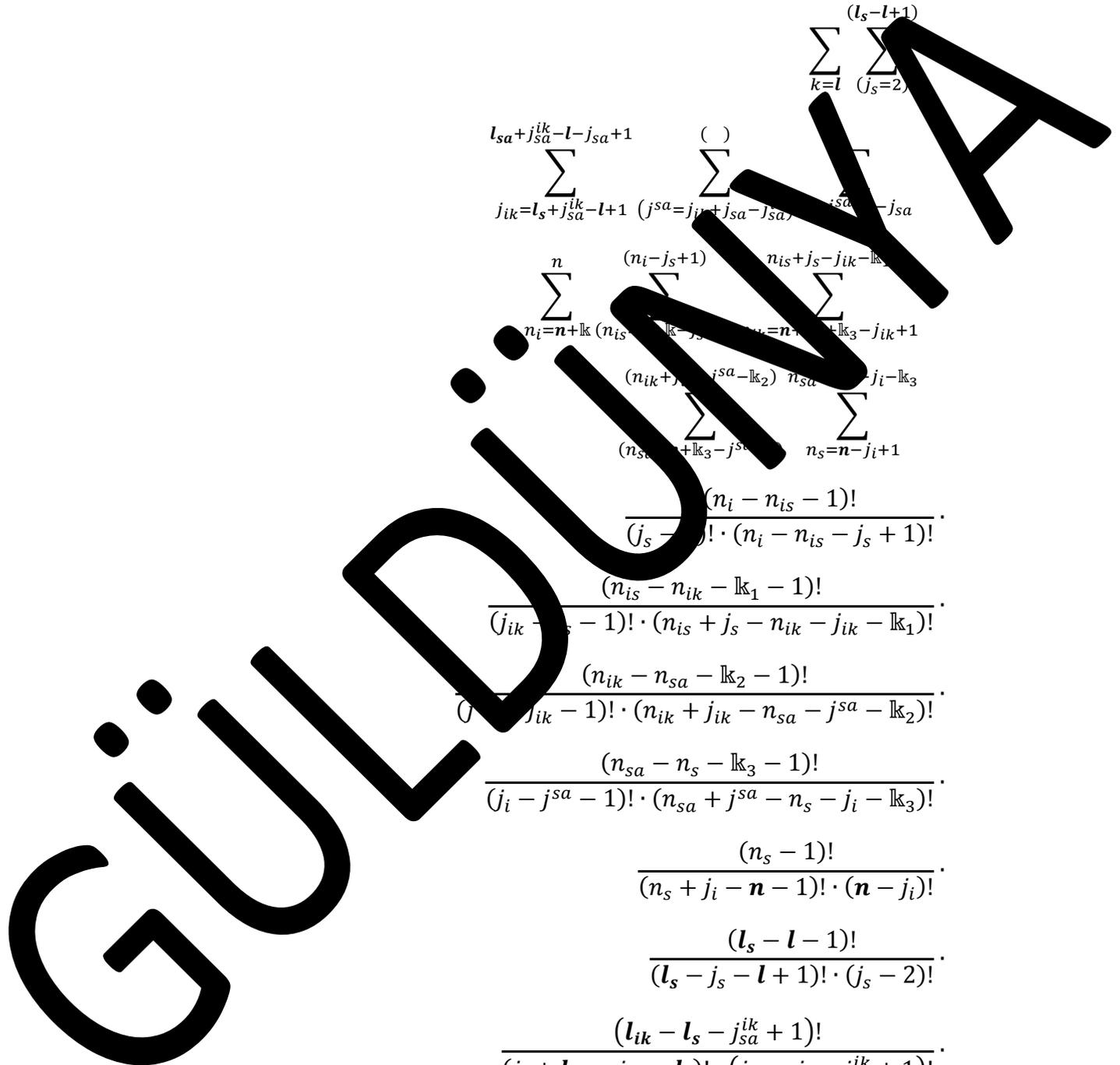
$$\frac{(n_{sa} - n_s - l_{k_3} - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - l_{k_3})!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$



$$\sum_{k=l}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa}}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j^{sa}+s-}^{()}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{ik}-k_1}^{()}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{(n_{sa}+j^{sa}-j_i)}^{()}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - k_2 - \dots - 2 \cdot j_{sa}^s)!}{(n_i - k_1 - k_2 - \dots - k_3)!}$$

$$\frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq 1 \wedge l_s \leq D - n - 1 \wedge$$

$$1 < j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_{sa}^{ik} + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_i \leq j_i + j_{sa} \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa}^{ik} - j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n - l_{sa} \leq D - l_s + j_{sa} - n - 1 \wedge$$

$$D < n \wedge I = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$fzS_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_{sa}+n-D-j_{sa})} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa}}^{l_{sa}+j_{sa}^{ik}-l-j_{sa}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2-j_{ik}+1}^{(n_{is}+j_s-j_{ik}-k_1)}$$

$$\sum_{(n_{sa}=n+k_3-j_{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa})} \sum_{n_s=n-j_i}^{(n_{sa}+j_{sa}-j_i-k_3)}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_s - 2)! \cdot (n_{is} + j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!}$$

$$\frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=l}^{(l_s-l-1)} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{l_{sa}+j_{sa}^{ik}-l-j_{sa}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

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$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{i_k}=n+l_{k_2}+l_{k_3}-j_{i_k}+1}^{n_{i_s}+j_s-j_{i_k}-l_{k_1}} \\
 & \sum_{(n_{s_a}=n+l_{k_3}-j^{s_a}+1)}^{(n_{i_k}+j_{i_k}-j^{s_a}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{s_a}+j^{s_a}-j_i-l_{k_3}} \\
 & \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \\
 & \frac{(n_{i_s} - n_{i_k} - l_{k_1} - 1)!}{(j_{i_k} - j_s - 1)! \cdot (n_{i_s} + j_s - j_{i_k} - l_{k_1})!} \cdot \\
 & \frac{(n_{i_k} - n_{s_a} - 1)!}{(j^{s_a} - j_{i_k} - 1)! \cdot (n_{i_k} + j_{i_k} - n_{s_a} - j^{s_a} - l_{k_2})!} \cdot \\
 & \frac{(n_{s_a} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{i_s} + j^{s_a} - n_s - l_{k_3})!} \cdot \\
 & \frac{(n_s - 1)!}{(n_{i_s} + j_i - n_{i_s} - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{i_k} - l_s - j_{s_a}^{i_k} + 1)!}{(j_s - j_{i_k} - j_{i_k} - l_s)! \cdot (j_{i_k} - j_s - j_{s_a}^{i_k} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=l}^{(l_s-l-1)} \sum_{(j_s=l_{s_a}+n-D-j_{s_a}+1)}^{(l_s-l-1)} \\
 & \sum_{j_{i_k}=j_s+j_{s_a}^{i_k}-1}^{()} \sum_{(j^{s_a}=j_{i_k}+j_{s_a}-j_{s_a}^{i_k})}^{()} \sum_{j_i=j^{s_a}+s-j_{s_a}}^{()} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{i_k}=n_{i_s}+j_s-j_{i_k}-l_{k_1}}^{()} \\
 & \sum_{(n_{s_a}=n_{i_k}+j_{i_k}-j^{s_a}-l_{k_2})}^{()} \sum_{n_s=n_{s_a}+j^{s_a}-j_i-l_{k_3}}^{()}
 \end{aligned}$$

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$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!} \cdot \frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!} \cdot \frac{(D - l)!}{(D + j_i - n - l_i)! (n - j_i)!}$$

$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa}^{sa}$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1 \wedge$

$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{ik} - 1 < j_{sa} - 1$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 7 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$fz^S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)} \sum_{j_i=l_{ik}+s+n-D-j_{sa}^{ik}}^{l_s+s-l}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
 & \frac{(n_s + \dots - n - 1)!}{(n_s + \dots - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(n_s - l - 1)!}{(n_s - l - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - l_s) \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D + l_i)!}{(D + \dots - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{(l_s - l + 1)} \sum_{(j_s = 2)} \\
 & \sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}} \binom{(\quad)}{(j^{sa} = j_i + j_{sa} - s)} \sum_{j_i = l_s + s - l + 1}^{l_{ik} + s - l - j_{sa}^{ik} + 1} \\
 & \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \\
 & \sum_{(n_{sa} = n + \mathbb{k}_3 - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = n - j_i + 1}^{n_{sa} + j^{sa} - j_i - \mathbb{k}_3} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
 \end{aligned}$$

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$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 1)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{j_{ik} = \dots}^{(\cdot)} \sum_{j_{sa} = \dots}^{(\cdot)} \sum_{j_i = \dots}^{(\cdot)} \sum_{j_s = \dots}^{(\cdot)} \frac{(n_i + j_s + j_{sa} - j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!} \cdot \frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

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$$fz^S_{j_s, j_{ik}, j_{sa}^{ik}, j_{sa}^i} = \sum_{l=1}^{k+1} \sum_{(j_s=2)}^{k+1}$$

$$\sum_{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}^{n} \sum_{(j_{sa}^{ik}+j_{sa}-j_{sa}^{ik})}^{n} \sum_{(j_i=j_{sa}+s-j_{sa})}^{n} \sum_{(n_i=n+k_1+1)}^{(n_i-1)} \sum_{(n_{is}=n+k_2+k_3-j_{ik}+1)}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_{ik}+j_{ik}-j_{sa}-k_2)}^{n_{sa}+j_{sa}-j_i-k_3} \sum_{(n_{sa}=n+k_3-j_{sa}+1)}^{n_s=n-j_i+1}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!}$$

$$\frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i - k_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=l}^{(l_s - l + 1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}} \frac{(l_{ik}+j_{sa}-l-j_{sa}^{ik}+1)!}{(j_{sa}=l_s+j_{sa}-l+1) \cdot (j_{sa}-j_{sa})}$$

$$\sum_{n_i=n+l_k}^n \frac{(n_i-j_s+1)!}{(n_{is}-l_k-j_s) \cdot (n_{is}+j_s-j_{ik}-l_k)} \sum_{n_{is}=n+l_{k_3}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_k} \frac{(n_{ik}+j_{sa}-l_{k_2})!}{(n_{sa}-l_{k_2}) \cdot (j_i-l_{k_3})} \sum_{n_s=n-j_i+1}^{n_{sa}+l_{k_3}-j_{sa}} \frac{(n_i - n_{is} - 1)!}{(j_s - l_s)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - l_{k_1} - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - l_{k_1})!}$$

$$\frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j_{ik} - l_{k_2} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - l_{k_2})!}$$

$$\frac{(n_{sa} - n_s - l_{k_3} - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i - l_{k_3})!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

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$$\sum_{k=l}^{\binom{)}{}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\binom{)}{}}$$

$$\sum_{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}^{\binom{)}{}} \sum_{(j_{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik})}^{\binom{)}{}} \sum_{j_i=j_{sa}+s-j_{sa}^{ik}}^{\binom{)}{}}$$

$$\sum_{n_i=n+k}^{\binom{)}{}} \sum_{(n_{is}=n+k-j_s+1)}^{\binom{)}{}} \sum_{n_{ik}=n_{is}-j_{ik}-k_1}^{\binom{)}{}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-k_2)}^{\binom{)}{}} \sum_{(n_{sa}=n_{sa}+j_{sa}^{ik}-j_i)}^{\binom{)}{}}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j_{sa}^{ik} - k_2 - k_1 - 2 \cdot j_{sa}^s)!}{(n_i + k_1 + k_2 - j_{sa}^{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{1}{(n + 2 \cdot j_s + j_{sa} - j_{sa}^{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq 1 \wedge l_s \leq D - n - 1 \wedge$$

$$1 < j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_{sa}^{ik} + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - j_{sa}^{ik} \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa}^{ik} - n - l_{ik} \leq D - l_s + j_{sa}^{ik} - n - 1 \wedge$$

$$D - n - 1 \wedge I = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^{ik}, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(j_{ik}-j^{sa}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_s+j^{sa}-l} \sum_{(j^{sa}=j_{ik}+j_{sa}-j^{sa})} \sum_{j_i=j^{sa}+s-}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2}^{n_{is}+j_s-j_{ik}-k_1} \dots -j_{ik}+1$$

$$(n_{ik}+j_{ik}-j^{sa}-k_2) \dots +j^{sa}-j_i-k_3$$

$$(n_{sa}=n+k_3-j_{sa}+1) \dots n_s=n-j_i+1$$

$$\frac{(n_s - n_{is} - 1)!}{(j_s - 2)! \cdot (n_{is} + j_s + 1)!}$$

$$\frac{(n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{ik} - j_{sa} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - k_2)!}$$

$$\frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j^{sa} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j^{sa} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=l_s+j^{sa}-l+1}^{l_{ik}-l+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j^{sa})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

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$$\begin{aligned}
 & \sum_{n_i=n+l}^n \sum_{(n_{is}=n+l-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l+k_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n+l+k_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-l_{k_3}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - l_{k_1})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{sa} + j^{sa} - n_s - l_{k_3})!} \cdot \\
 & \frac{(n_s - 1)!}{(n_{sa} + j_i - n_s - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s - j_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot
 \end{aligned}$$

$$\sum_{k=l}^{\binom{D}{j_s}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\binom{D}{j_s}}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{\binom{D}{j_s}} \sum_{j_i=j^{sa}+s-j_{sa}}^{\binom{D}{j_s}}$$

$$\sum_{n_i=n+l}^n \sum_{(n_{is}=n+l-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}}^{\binom{D}{j_s}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{\binom{D}{j_s}} \sum_{n_s=n_{sa}+j^{sa}-j_i-l_{k_3}}^{\binom{D}{j_s}}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}$$

$$\frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!}$$

$$\frac{(D - l)!}{(D + j_i - n - l_i)! (n - j_i)!}$$

$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa}^{sa}$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1 \wedge$

$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{ik} - 1 < j_{sa} - 1$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 7 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$fz^S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_{ik} + n - D - j_{sa}^{ik})} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-l+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
 & \frac{(n_s + j_i - n - 1)!}{(n_s + j_i - n - 1)!} \cdot \\
 & \frac{(n_s - l - 1)!}{(n_s - l - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - l_s) \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + l_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{l_s-l+1} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_s-l+1)} \\
 & \sum_{j_{ik}=j_s+j_{sa}^{lk}-1}^{l-l+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j^{sa}+s-j_{sa}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k+l_k+l_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_k-1} \\
 & \sum_{(n_{sa}=n+l_k-3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_k-2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-l_k-3} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
 \end{aligned}$$

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$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{k=l}^{(l_s-l+1)} \sum_{j_s=j_s}^{(j_s+j_{sa}^{lk}-j_{sa}^{lk}+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{(j_s+j_{sa}^{lk}-1)} \sum_{n_{is}=n+l_k-j_s+1}^{(n_i-l+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(n_i+l_s)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3} (n_i + j_s + j_{sa} - j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^s)! \cdot \frac{1}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$D + l_s + s - n - l_i + 1 \leq l \leq i - 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$\sum_{(j_s=2)}^{(l_s-l)} \sum_{(j_i=l_i+n-D)}^{(j^{sa}, j_i)} \frac{(n_i - j_s - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

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$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$f_z^S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=z)}^{(l_s-l+1)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-l+1} \sum_{(j_{sa}=j_{ik}+j_{sa}^{ik})}^{()} \sum_{(j_i=j_{sa}^{ik}-j_{sa})}^{()}$$

$$\sum_{n_i=n+k}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{is}+j_s-j_{ik})}^{(n_{is}+j_s-j_{ik})}$$

$$\sum_{(n_{ik}=n-k_2+k_3-j_{ik}+1)}^{(n_{ik}=n-k_2+k_3-j_{ik}+1)} \sum_{(n_{ik}-j_{sa}-k_2)}^{(n_{ik}-j_{sa}-k_2)}$$

$$\sum_{(n_s=n-k_3-j_i+1)}^{(n_s=n-k_3-j_i+1)} \sum_{(n_s=n-j_i+1)}^{(n_s=n-j_i+1)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(n_{sa} - k_1 - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!}$$

$$\frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i - k_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_s-l+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{lk}-1}^{()} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j^{sa}+s-j_i}^{()}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{ik}-k_1}^{()}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{(n_{sa}+j^{sa}-j_i)}^{()}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - k_2 - j_i - 2 \cdot j_{sa}^s)!}{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - k_2 - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l \neq l \wedge l_s \leq D - n - 1 \wedge$

$D + l_s + s - j_s - l_i + 1 < l \leq l_i - 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{lk} - 1 \wedge j_s + j_{sa}^{lk} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa}^{lk} - j_{sa}^{ik} \leq j^{sa} \leq j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{ik} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$D + l_s - 1 < l_i \leq D + l_s + s - n - 1 \wedge$

$D \geq n < n \wedge l = k > 0 \wedge$

$j_{sa} - j_{sa} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 7 \wedge s = s + k \wedge$

$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_i+j_{sa}^{ik}-l-s+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}}$$

$$\sum_{(n_{sa}=n+l_{k_3}-j_{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa})} \sum_{n_s=n-j_i+l_{k_3}}^{n_{sa}+j^{sa}-j_i-l_{k_3}}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_s - 2)! \cdot (n_i - n_{ik} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - l_{k_1})!}$$

$$\frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - l_{k_2})!}$$

$$\frac{(n_{sa} - n_s - l_{k_3} - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - l_{k_3})!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_i+n-D-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

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$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3} \frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - k_1 - k_2 - k_3 - 2 \cdot j_s)!}{(n_i - n - k_1 - k_2 - k_3)!} \cdot \frac{1}{(n + 2 \cdot j_s + j_{sa} - j_i - j_s \cdot j^{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!} \cdot \frac{(D - n)!}{(D - j_i - n - j_i)!}$$

$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$
 $D + l_s + s - n - l_i + 1 \leq l \leq i \wedge l - 1 \wedge$
 $1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} + j_{sa}^{ik} - 1 \wedge$
 $j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + j_{sa} \leq j_i \leq n \wedge$
 $l_{ik} - j_{sa}^{ik} + 1 > l \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_{sa} + j_{sa} - s = l_{sa} \wedge$
 $D + j_{sa} - n < l_{sa} \leq l + l_s + j_{sa} - n \wedge$
 $D \geq n < n \wedge l_{ik} > 0 \wedge$
 $j_{sa} < j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa} < j_{sa}^{ik} - 1 \wedge$
 $s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \dots, k_1, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$
 $s \geq 7 \wedge s = s + 1 \wedge$
 $k_z: z = 3 \wedge k_z = k_1 + k_2 + k_3 \Rightarrow$

$$f^z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{()} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{sa}+s-l-j_{sa}+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_s+1) \\ (n_{is}=n+l_k-j_s+1)}} \sum_{\substack{n_{is}+j_s-j_{ik}-l_{k_1} \\ n_{ik}=n+l_{k_2}+l_{k_3}-j_{ik}+1}} \sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-l_{k_2}) \\ (n_{sa}=n+l_{k_3}-j^{sa}+1)}} \sum_{\substack{n_{sa}+j^{sa}-j_i-l_{k_3} \\ n_s=n-j_i+1}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - l_{k_1})!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \frac{(n_{sa} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{sa} + j^{sa} - n_s - l_{k_3})!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s - j_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l}^{\binom{()}{j_s=j_{ik}-j_{sa}^{ik}+1}}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{\substack{() \\ (j^{sa}=j_i+j_{sa}-s)}} \sum_{\substack{l_s+s-l \\ j_i=l_{sa}+n+s-D-j_{sa}}}$$

$$\sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_s+1) \\ (n_{is}=n+l_k-j_s+1)}} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}}$$

$$\sum_{\substack{() \\ (n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}} \sum_{n_s=n_{sa}+j^{sa}-j_i-l_{k_3}}$$

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$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}$$

$$\frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!}$$

$$\frac{(D - l)!}{(D + j_i - n - l_i)! (n - j_i)!}$$

$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$

$D + l_s + s - n - l_i + 1 \leq l \leq i \wedge l - 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i - n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}$

$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$

$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} \wedge j_{sa}^s < j_{sa}^{ik} \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 7 \wedge s = s + \mathbb{k}$

$\mathbb{k}_2 = 3 \wedge \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$f_z^S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_s - l + 1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
 & \frac{(n_s + n - 1 - j_i)!}{(n_s + n - 1)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - l_s - j_{sa}^{ik} - 1)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=l}^{(\cdot)} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\cdot)} \\
 & \sum_{j_{ik} = j^{sa} + j_{sa}^{lk} - j_{sa}}^{(l_s + j_{sa} - l)} \sum_{(j^{sa} = l_{sa} + n - D)} \sum_{j_i = j^{sa} + s - j_{sa}} \\
 & \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1} \\
 & \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\cdot)} \sum_{n_s = n_{sa} + j^{sa} - j_i - \mathbb{k}_3} \\
 & \frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!} \cdot \\
 & \frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}
 \end{aligned}$$

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$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$D + l_s + s - n - l_i + 1 \leq l \leq i - 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

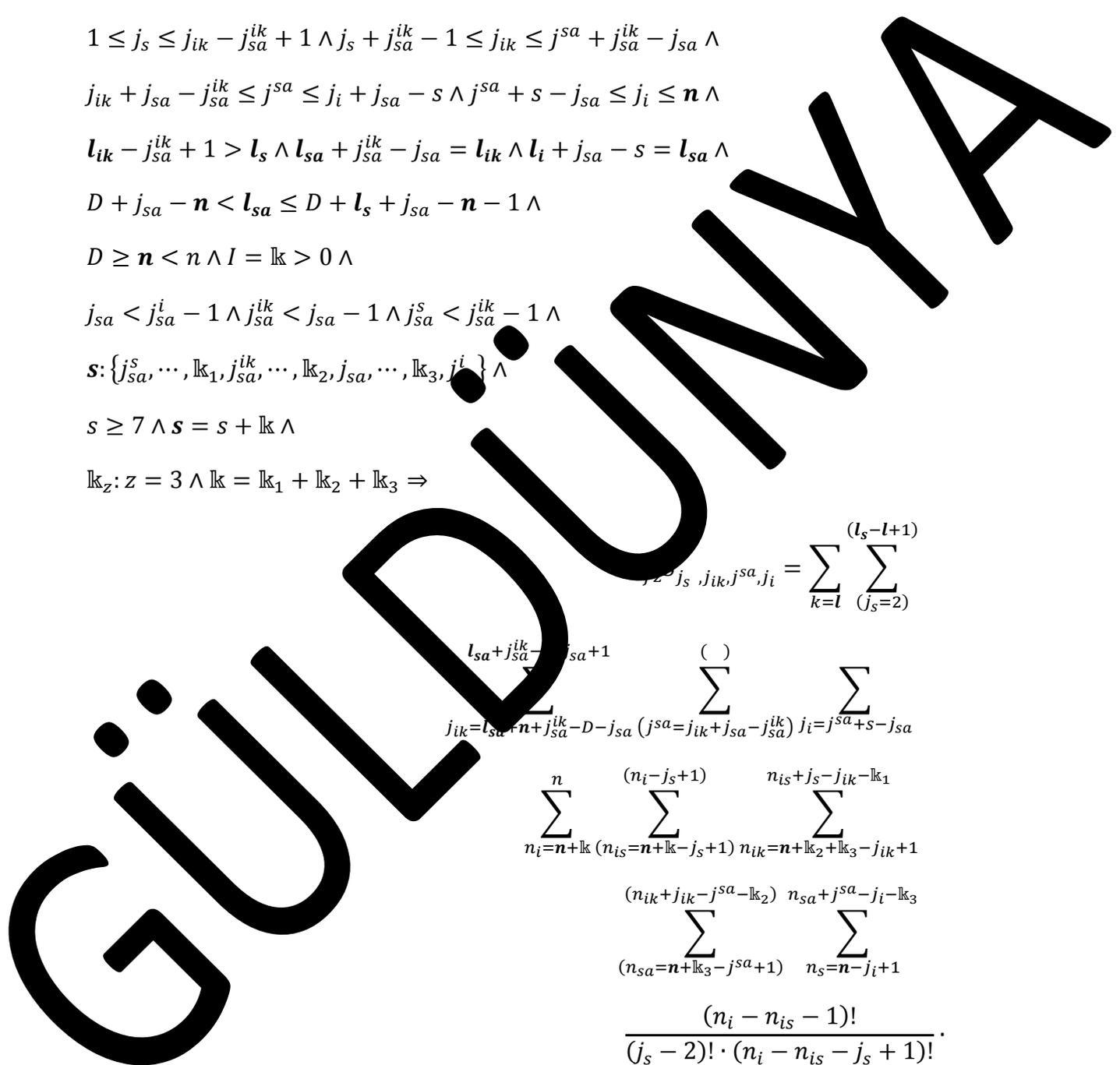
$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$\sum_{j_s=2}^{l_s-l+1} \sum_{j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa}}^{j_{sa}+j_{sa}^{ik}-j_{sa}+1} \sum_{j_i=j^{sa}+s-j_{sa}}^{(j_{sa}+j_{sa}^{ik}-j_{sa}+1)} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_{sa}=n+k_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-k_3} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!}$$



$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{j_{ik}=l_{sa}}^{l_s + j_{sa}^{ik} - l} \sum_{j_{sa}^{ik}=D - j_{sa}}^{j_{sa}^{ik} - \mathbb{k}_2 + j_{sa} - j_{sa}^{ik}} \sum_{j_i=j^{sa} + s - j_{sa}}^{(n_i - 1)} \sum_{n_{is}=n + \mathbb{k} - j_s + 1}^{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s=n_{sa} + j^{sa} - j_i - \mathbb{k}_3}^{(n_i + j_s + j_{sa} - j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^s)!} \frac{1}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$D + l_s + s - n - l_i + 1 \leq l \leq i - 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_s^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$\sum_{j_{ik}^{sa} + j_{sa}^{ik} - j_{sa}}^{(j_{sa}^{sa} - j_{sa} - s)} \sum_{j_i = l_{ik} + n + s - D - j_{sa}^{ik}}^{(l_s - l - 1)} \sum_{(j_s = 2)}^{(l_s - l - 1)}$$

$$\sum_{(n_i - j_s)}^{(n_i - j_s)} \sum_{(n_{is} = n + k - j_s + 1)}^{(n_{is} = n + k - j_s + 1)} \sum_{(n_{ik} = n + k_2 + k_3 - j_{ik} + 1)}^{(n_{is} + j_s - j_{ik} - k_1)}$$

$$\sum_{(n_{sa} = n + k_3 - j_{sa} + 1)}^{(n_{ik} + j_{ik} - j_{sa} - k_2)} \sum_{(n_s = n - j_i + 1)}^{(n_{sa} + j_{sa} - j_i - k_3)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!}$$

$$\frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i - k_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\cdot)} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\cdot)} \sum_{j_i=l_{ik}}^{l_s-l} \sum_{j_{sa}=j_{sa}^{ik}}^{j_{sa}^{ik}-j_{ik}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{ik}=n-k)}^{(n_i-j_s+1)} \sum_{n_{ik}=j_s-j_{ik}-k_1}^{(\cdot)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{sa}-k_2)}^{(\cdot)} \sum_{n_{sa}=j_{sa}-j_i-k_3}^{(\cdot)}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - k_2 - k_3 - 2 \cdot j_{sa}^s)!}{(n_i - k_1 - k_2 - k_3)!}$$

$$\frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l \leq D - n + 1 \wedge$$

$$D + l + s - i < l \leq l \leq i - 1 \wedge$$

$$1 \leq j_s \leq j_s - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{sa} + j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1 \wedge$$

$$D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$fz S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}^{(l_s-l+1)}$$

$$\sum_{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}^{(l_{ik}+j_{sa}-l-j_{sa}^{ik}+1)} \sum_{(j_{sa}=l_{ik}+n+j_{sa}-D)}^{(n_i-j_s+1)} \sum_{i=j_s-j_{sa}}^{n_{is}+j_s-j_{ik}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_i-j_s+1)}^{(n_{ik}-j_{sa}-k_2)} \sum_{n_{ik}=n+k_3-j_{ik}+1}^{n_s=n-j_i+1}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{ik} - k_1 - 1)!}{(j_{ik} - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!}$$

$$\frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i - k_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

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$$\sum_{k=l}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}^{(l_s+j_{sa}-l)} \sum_{(j_{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik})} \sum_{j_i=j_{sa}+s-j_{sa}^{ik}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-k_2)}^{()} \sum_{(n_{sa}=n_{sa}+j_{sa}-j_i)}^{()}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j_{sa}^{ik} - k_2 - j_{sa} - 2 \cdot j_{sa}^s)!}{(n_i + k_1 + k_2 - j_{sa} - j_{sa}^{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{1}{(n + 2 \cdot j_s + j_{sa} - j_{sa}^{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq 1 \wedge l_s \leq D - n - 1 \wedge$$

$$D + l_s + s - j_{sa} - l_i + 1 < l \leq l - 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} - 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{ik} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D - j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} - j_{sa} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-l+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j^{sa}+s-j}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_{sa}=n+k_3-j_{ik}+1)}^{n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n+k_3-j_{ik}+1)}^{(n_{ik}+j_{ik}-j^{sa})} \sum_{(n_s=n-j_i)}^{(n_{sa}+j_{ik}-j_i-k_3)}$$

$$\frac{(n_i - n_{ik} - k_1 - 1)!}{(j_s - 2)! \cdot (n_{is} + j_s + 1)!}$$

$$\frac{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!}{(n_{ik} - n_{sa} - k_2 - 1)!}$$

$$\frac{(n_{sa} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - k_2)!}{(n_{sa} - n_s - k_3 - 1)!}$$

$$\frac{(j_i - n_{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!}{(n_s - 1)! \cdot (n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j^{sa}+s-j_{sa}}$$

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$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{(\cdot)} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3} \frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - k_1 - k_2 - k_3 - 2 \cdot j_s)!}{(n_i - n - k_1 - k_2 - k_3)!} \cdot \frac{1}{(n + 2 \cdot j_s + j_{sa} - j_i - j_s \cdot j_{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!} \cdot \frac{(D - l)!}{(D - j_i - n - l + 1)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} < j^{sa} + j_{sa}^{ik} - j_i \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa}^{ik} + s - j_i \leq j_i \leq j_{ik} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa} - j_{sa} > l_{ik} \wedge j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^s, \dots, k_2, j_{sa}^s, \dots, k_3, \dots\} \wedge$$

$$s \geq 1 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$f_z^S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=l} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(j_i+j_{sa}-s)} \sum_{j_i=s+1}^{l_{ik}+j_{sa}^{ik}-l-s+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1}$$

$$\begin{aligned}
& \sum_{(n_{sa}=n+k_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-k_3} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{ik} - k_2)!} \cdot \\
& \frac{(n_{sa} - n_{is} - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_{is} - j_i - k_3)!} \cdot \\
& \frac{(n_s - 1)!}{(n - j_i - 1)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - l_{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} - l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +
\end{aligned}$$

$$\sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)}$$

$$\begin{aligned}
& \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}-l+1} \sum_{(j^{sa}=j_{sa}+1)}^{(l_{sa}-l+1)} \sum_{j_i=l_{ik}+j_{sa}^{ik}-l-s+2}^{l_i-l+1} \\
& \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \\
& \sum_{(n_{sa}=n+k_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-k_3}
\end{aligned}$$

$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
 & \frac{(n_s + j_i - n - 1)!}{(n - 1)!} \cdot \\
 & \frac{(n - l - 1)!}{(j_s - l - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j^{sa} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (l_{sa} + j^{sa} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(l_i + j^{sa} - l_{sa} - s)!}{(j_i + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=l} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()} \\
 & \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{()} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{()} \sum_{j_i=s+1}^{l_{ik}+j_{sa}^{ik}-l-s+1} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \\
 & \frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!} \cdot \\
 & \frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!} \cdot
 \end{aligned}$$

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$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\}$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$\begin{aligned} S_{i,j_i} &= \sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)} \\ &\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j_i+j_{sa}-s)}^{(j_i+j_{sa}-s)} \sum_{j_i=s+1}^{l_s+s-l} \\ &\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\ &\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \end{aligned}$$

$$\begin{aligned}
& \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!} \cdot \\
& \frac{(l_i + j_{sa} - l_{sa})!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - l_{sa} - s)!} \cdot \\
& \frac{(l_s - l_i)!}{(n - l_i) \cdot (n - j_i)!} \cdot \\
& \sum_{j_s=l}^{l_s+l-1} \sum_{j_s=j_{ik}-j_{sa}^{ik}+1}^{l_s+l-1} \\
& \sum_{j_s=l_s+1}^{l_s+j_{sa}^{ik}} \sum_{j^{sa}=j_{sa}+1}^{(l_{sa}-l+1)} \sum_{j_i=l_s+s-l+1}^{l_i-l+1} \\
& \sum_{n_{is}=n+\mathbb{k}-j_s+1}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot
\end{aligned}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{i=l}^n \sum_{j_s=j_{ik}-j_{sa}^{ik}}$$

$$\sum_{j_{sa}+j_{sa}^{ik}=j_{sa}^{ik}} \sum_{j_i=j_i+j_{sa}^{ik}} \sum_{j_i=s+1}^{l_s+s-l}$$

$$\sum_{n+l_k}^n \sum_{(n_{is}=n+l_k)} \sum_{j_s+1}^{j_s+1} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k1}}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k2}} \sum_{n_s=n_{sa}+j^{sa}-j_i-l_{k3}}$$

$$\frac{(n_i + j_{sa} + j_{sa}^{ik} - j^{sa} - j_i - l_{k1} - l_{k2} - l_{k3} - 2 \cdot j_{sa}^s)!}{(n_i - n - l_{k1} - l_{k2} - l_{k3})!}$$

$$\frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fz S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=l}^{\binom{()}{j_s - j_{sa} - j_{sa}^{ik} + 1}} \sum_{j_{ik} = j_{sa}^{ik} + 1}^{j_{sa} + j_{sa}^{ik} - j_{sa} (l_{ik} + j_{sa}^{ik} - j_{sa}^{ik} + 1)} \sum_{j_i = j_{sa} + s}^{l_i + 1} \sum_{n_i = n}^n \sum_{n_{is} = n + \mathbb{k}_1 + 1}^{n_{is} + 1} \sum_{n_{ik} = n + j_{ik} + 1}^{n_{ik} + 1} \sum_{n_{sa} = n - \mathbb{k}_3 - j_{sa} + 1}^{n_{sa} + j_{sa} - j_i - \mathbb{k}_2} \sum_{n_s = n - j_i + 1}^{n_s} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j_{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j_{sa} - s)!}$$

$$\begin{aligned}
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{(\quad)} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\quad)} \\
 & \sum_{j_{ik} = j_{sa}^{ik} + 1}^{l_{ik} - l + 1} \sum_{(j_{sa} = l_{ik} + j_{sa}^{ik} - l - s + 2)}^{(l_{sa} - l + 1)} \sum_{j_{sa}^{sa} + s - j_{sa}}^{l_i - l + 1} \\
 & \sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s)}^{(n_i - j_s + 1)} \sum_{(n_{ik} = n + k_2 + l_{s_1} + 1)}^{n_{is} + j_s - k_1} \\
 & \frac{(n_{ik} + j_{ik} - j_{sa} - k_1 - 1)! \cdot (n_{sa} + j_{sa} - j_i - k_1 - 1)!}{(n_{sa} - k_3 - j_s - 1)! \cdot (j_i + 1)!} \\
 & \frac{(j_{ik} - j_{sa} - 1)! \cdot (n_{is} - 1)!}{(j_{ik} - j_{sa} - 1)! \cdot (n_{is} - j_s + 1)!} \\
 & \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_{sa} - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!} \\
 & \frac{(n_{sa} - n_s - k_3 - 1)!}{(j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i - k_3)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j_{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j_{sa} - s)!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -
 \end{aligned}$$

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$$\begin{aligned}
 & \sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)} \\
 & \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(l_{ik}+j_{sa}^{ik}-l-s+1)} \sum_{(j^{sa}=j_{sa}+1)} \sum_{j_i=j^{sa}+s-} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+}^{(n_i-j_s+1)} \sum_{(j_{ik}=k_1)} \\
 & \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{(\cdot)} \sum_{(n_{sa}+j^{sa}-j_i)} \\
 & \frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - k_2 - \dots - 2 \cdot j_{sa})!}{(n_i - k_1 - k_2 - \dots - k_3)!} \\
 & \frac{1}{(n + 2 \cdot j_s + j_{sa} - j_i - 2 \cdot j_{sa})!} \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

$$D \geq n < n \wedge l \neq 1 \wedge l_i \leq D + s - 1 \wedge$$

$$1 < j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_{sa}^{ik} + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa}^{ik} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n - k > k \wedge$$

$$j_{sa}^{ik} - j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 1 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)}$$

$$\begin{aligned}
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{j_{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j_{sa}=j_{sa}+1)}^{(l_s+j_{sa}-l)} \sum_{j_i=j_{sa}+s-j_{sa}}^{l_i-l+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k+l_{k_2}+l_{k_3}-j_i}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n+l_{k_3}-j_{sa}+1)}^{(n_{ik}+j_{ik}-j_{sa}-l_{k_2})} \sum_{n_s=j_i+1}^{n_{sa}+j_{sa}-j_i-l_{k_1}} \\
 & \frac{(n_i-1)!}{(j_s-2)! \cdot (n_i-n_{is}-1)!} \cdot \\
 & \frac{(n_i-n_{ik}-l_{k_1}-1)!}{(j_{ik}-j_s-1)! \cdot (n_i-n_{ik}-j_{ik}-l_{k_1})!} \cdot \\
 & \frac{(n_{ik}-n_{sa}-l_{k_2}-1)!}{(j_{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{sa}-n_{sa}-j_{sa}-l_{k_2})!} \cdot \\
 & \frac{(n_{sa}-l_{k_3}-1)!}{(j_i-n_{sa}-1)! \cdot (n_{sa}+j_{sa}-n_s-j_i-l_{k_3})!} \cdot \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \\
 & \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \cdot \\
 & \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(l_{ik}+l_{sa}-j_{sa}-l_{ik})! \cdot (j_{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot \\
 & \frac{(l_i+j_{sa}-l_{sa}-s)!}{(j_{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j_{sa}-s)!} \cdot \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \\
 & \sum_{k=l}^{\binom{()}{}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\binom{()}{}} \\
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-l} \sum_{(j_{sa}=l_s+j_{sa}-l+1)}^{(l_{sa}-l+1)} \sum_{j_i=j_{sa}+s-j_{sa}}^{l_i-l+1}
 \end{aligned}$$

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$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_s+1) \\ (n_{i_s}=n+l_k-j_s+1)}} \sum_{\substack{n_{i_s}+j_s-j_{ik}-l_{k_1} \\ n_{ik}=n+l_{k_2}+l_{k_3}-j_{ik}+1}} \\
 & \sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-l_{k_2}) \\ (n_{sa}=n+l_{k_3}-j^{sa}+1)}} \sum_{\substack{n_{sa}+j^{sa}-j_i-l_{k_3} \\ n_s=n-j_i+1}} \\
 & \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \\
 & \frac{(n_{i_s} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{i_s} + j_s - j_{ik} - l_{k_1})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{sa} + j^{sa} - n_s - l_{k_3})!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa})! \cdot j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=l}^{\binom{D}{j_s}} \sum_{\substack{(\cdot) \\ (j_s=j_{ik}-j_{sa}^{ik}+1)}} \\
 & \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{\substack{(l_s+j_{sa}-l) \\ (j^{sa}=j_{sa}+1)}} \sum_{j_i=j^{sa}+s-j_{sa}} \\
 & \sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_s+1) \\ (n_{i_s}=n+l_k-j_s+1)}} \sum_{n_{ik}=n_{i_s}+j_s-j_{ik}-l_{k_1}}
 \end{aligned}$$

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$$\frac{\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3} \binom{()}{(n_i+2 \cdot j_s+j_{sa}-j^{sa}-j_i-k_1-k_2-k_3-2 \cdot j_{sa}^s)!} (n_i-n-k_1-k_2-k_3)! \cdot \frac{1}{(n+2 \cdot j_s+j_{sa}-j^{sa}-j_i-2 \cdot j_s^s)!} \cdot \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \cdot \frac{(D-1)!}{(D+j_s-n-l_i)! \cdot (n-l_i)!}$$

$D \geq n < n \wedge l \neq i \wedge l_i \leq D + s - n \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$

$D \geq n < n \wedge I = k > 0 \wedge$

$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 7 \wedge s = s + k_1$

$k_2 \cdot z = 3 \wedge k_1 + k_2 + k_3 \Rightarrow$

$$fz S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=l} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)} \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}-l+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i-l+1} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_{sa}=n+k_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-k_3}$$

$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
 & \frac{(n_s + j_i - n - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(n - l - 1)!}{(n - l - 1)! \cdot (j_s - l - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(j_{sa} + j_{sa} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j_i + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)} \\
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}-l+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\cdot)} \sum_{j_i=j^{sa}+s-j_{sa}} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\cdot)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \\
 & \frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!} \cdot \\
 & \frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!} \cdot
 \end{aligned}$$

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$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\}$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$\begin{aligned} & \sum_{k=l}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()} \\ & \sum_{j_{ik}=j_{sa}^{ik}+1}^{+j_{sa}^{ik}-l} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{(l_i-l+1)} \\ & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \\ & \sum_{(n_{sa}=n+k_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-k_3} \\ & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \\ & \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \\ & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \end{aligned}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!} \cdot \frac{(l_i + j_{sa} - l_{sa})!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - l_{sa} - s)!} \cdot \frac{(D - l_i)!}{(n - l_i) \cdot (n - j_i)!} \sum_{j_s = j_{ik} - j_{sa}^{ik} + 1}^{\binom{l_s + j_{sa}^{ik} - l}{j_{ik} = j_{sa}^{ik}}} \sum_{j_i = j_{ik} + j_{sa} - j_{sa}^{ik}}^{\binom{n}{n_{is} = n + \mathbb{k} - j_s + 1}} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}^{\binom{n_i - j_s + 1}{n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}} \sum_{n_s = n_{sa} + j^{sa} - j_i - \mathbb{k}_3}^{\binom{n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^s}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}} \cdot \frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq j_i \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$\begin{aligned} & \sum_{j_s=j_s+j_{sa}^{ik}-1}^{(l_{ik}-l-j_{sa}^{ik}+1)} \sum_{j_{ik}=j_{sa}^{ik}+j_{sa}-j_{sa}}^{(l_s-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{(l_i-l+1)} \\ & \sum_{n+l}^{(n_i-j_s)} \sum_{(n_{is}=n+k-j_s+1)}^{n_{is}+j_s-j_{ik}-k_1} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \\ & \sum_{(n_{sa}=n+k_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-k_3} \\ & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ & \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \\ & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\ & \frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!} \cdot \\ & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\ & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \end{aligned}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j_{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j_{sa} - s)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{k=l}^{(l - l - j_{sa}^{ik} + 2)} \sum_{r=2}^{(r-2)} \sum_{j_{ik}=j_s + j_{sa}^{lk}}^{(j_{ik}+1)} \sum_{j_{sa}=j_{ik} + j_{sa} - j_s}^{(j_{sa}+1)} \sum_{j_i=j_{sa} + s - j_{sa}}^{(j_i+1)} \sum_{n_i=n+lk}^{(n_i+1)} \sum_{n_i=n+lk-j_s}^{(n_i+1)} \sum_{n_{ik}=n_{is} + j_s - j_{ik} - lk_1}^{(n_{ik}+1)} \sum_{(n_{ik} + j_{ik} - j_{sa} - lk_2)}^{(n_{ik}+1)} \sum_{n_s=n_{sa} + j_{sa} - j_i - lk_3}^{(n_s+1)} \frac{(n_i + 2 \cdot j_s + j_{sa} - j_{sa} - j_i - lk_1 - lk_2 - lk_3 - 2 \cdot j_{sa}^s)!}{(n - n - lk_1 - lk_2 - lk_3)!} \cdot \frac{1}{(n + 2 \cdot j_s + j_{sa} - j_{sa} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D > l < n \wedge l \neq i \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{sa} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} - j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=l}^{(l_s-l+1)} \sum_{j_s=2}^{(l_s-l+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(l_{sa}-l+1)} \sum_{(j_{sa}=j_{ik}+j_{sa}^{ik})}^{(l_s-l+1)} \sum_{j_i=j_s+j_{sa}-j_{sa}^{ik}}^{(l_s-l+1)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{is}=j_s-j_{ik}}^{n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1)}^{(n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1)} \sum_{(n_{ik}-j_{sa}-\mathbb{k}_2)}^{(n_{ik}-j_{sa}-\mathbb{k}_2)}$$

$$\sum_{(n_s=n+\mathbb{k}_3-j_i+1)}^{(n_s=n+\mathbb{k}_3-j_i+1)} \sum_{n_s=n-j_i+1}^{(n_s=n-j_i+1)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(n_{sa} - \mathbb{k}_2 - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i - \mathbb{k}_3)!}$$

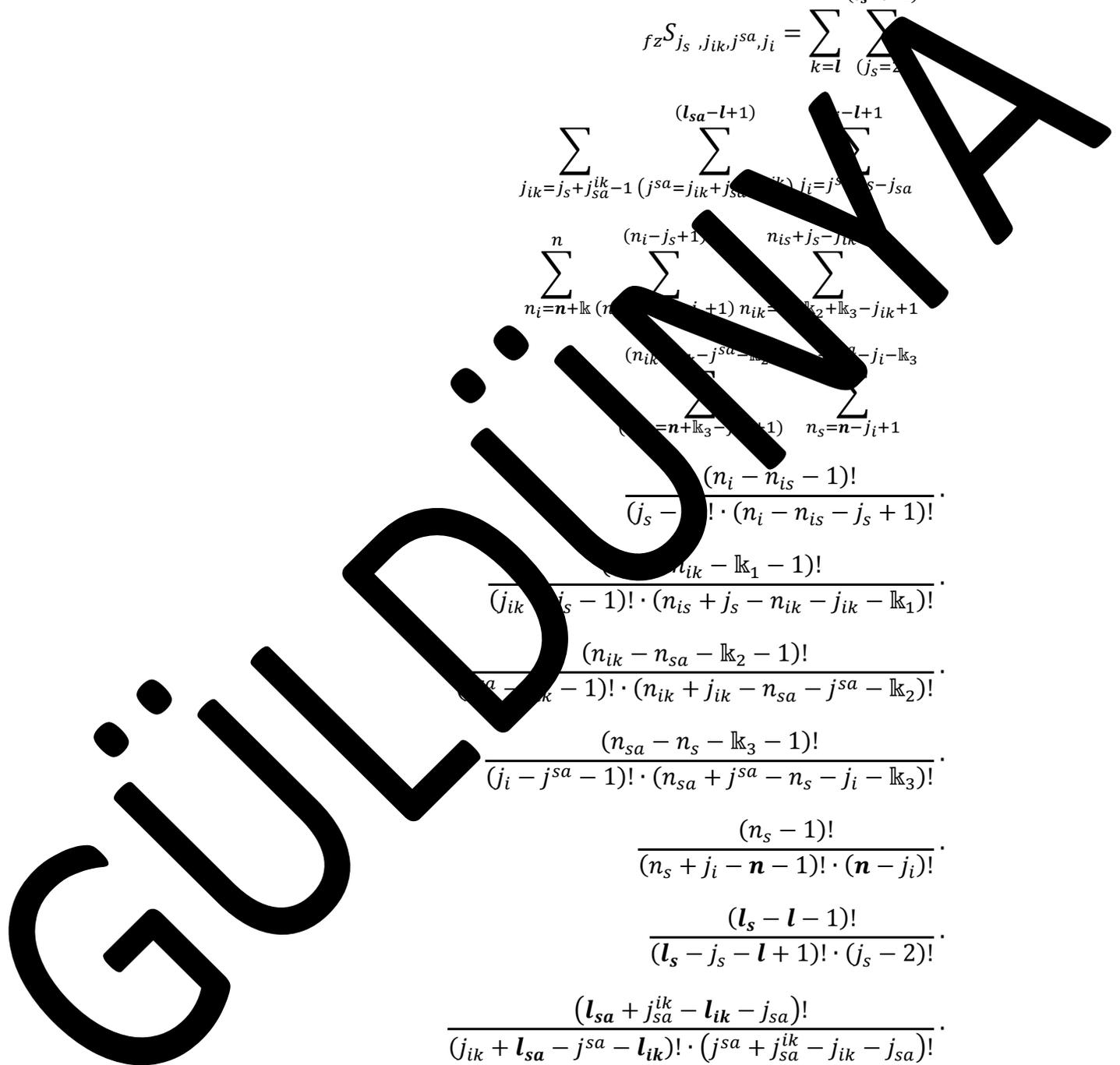
$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j_{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j_{sa} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$



$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}^{(l_s-l+1)} \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{()} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j_{sa}+s-j_{sa}}^{()} \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-l_{k_1}}^{()} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-l_{k_2})}^{()} \sum_{(n_s=n_{sa}+j_{sa}-j_{sa}^i)}^{()} \frac{(n_i+2 \cdot j_s+j_{sa}-j_{sa}^{ik}-l_{k_1}-l_{k_2}-l_{k_3}-2 \cdot j_{sa}^i)!}{(n_i-n-l_{k_1}-l_{k_2}-l_{k_3})!} \frac{1}{(n+2 \cdot j_s+j_{sa}-j_{sa}^{ik}-j_i-2 \cdot j_{sa}^i)!} \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!}$$

$$D \geq n < n \wedge l \neq l \wedge l_s \leq D - n - 1 \wedge$$

$$1 \leq j_s \leq j_{ik} + j_{sa}^{ik} + 1 \wedge j_i + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - j_{sa} \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa}^{ik} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n - 1 \leq D + j_i + s - n - 1 \wedge$$

$$D > n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s \in \{l_{k_1}, l_{k_1}, j_{sa}^{ik}, \dots, l_{k_2}, j_{sa}, \dots, l_{k_3}, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$l_{k_z}: z = 3 \wedge k = l_{k_1} + l_{k_2} + l_{k_3} \Rightarrow$$

$$\begin{aligned}
 f_z S_{j_s, j_{ik}, j_{sa}, j_i} &= \sum_{k=l}^{(\quad)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)} \\
 &\sum_{j_{ik}=j_{sa}^{ik}+1}^{j_{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=l_{sa}+n-D)}^{(j_i+j_{sa}-s)} \sum_{j_i=l_i+n-l}^{l_{ik}+s-l-j_{sa}^{ik}+1} \\
 &\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_{sa}=n+k_3-j_i+1)}^{(n_{ik}+j_{ik}-j_{sa}^{ik}+1)} \sum_{n_s=n-j_i+l}^{(n_{ik}+j_{ik}-j_{sa}^{ik}+1)} \\
 &\frac{(n_s - n_{is} - 1)!}{(j_s - 2)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - 1)!} \\
 &\frac{(n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \\
 &\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{ik} - j_{sa} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!} \\
 &\frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i - k_3)!} \\
 &\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 &\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \\
 &\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \\
 &\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j_{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j_{sa} - s)!} \\
 &\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 &\sum_{k=l}^{(\quad)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)}
 \end{aligned}$$

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$$\begin{aligned}
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}-l+1} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-l+1)} \sum_{j_i=l_{ik}+s-l-j_{sa}^{ik}+2}^{l_i-l+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k+l_3-j_{ik}-l_1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n+l_{k_3}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{(n_s=j_i+1)}^{n_{sa}+j^{sa}-j_i-l_2} \\
 & \frac{(n_i-1)!}{(j_s-2)!(n_i-n_{is}+1)!} \cdot \\
 & \frac{(n_{is}-n_{ik}-l_{k_1}-1)!}{(j_{ik}-j_s-1)!(n_{is}-n_{ik}-j_{ik}-l_{k_1})!} \cdot \\
 & \frac{(n_{ik}-n_{s_3}-l_{k_2}-1)!}{(j^{sa}-j_{ik}-1)!(n_{ik}+j_s-n_{sa}-j^{sa}-l_{k_2})!} \cdot \\
 & \frac{(n_{sa}-n_s-l_{k_3}-1)!}{(j_i-j^{sa}-1)!(n_{sa}+j^{sa}-n_s-j_i-l_{k_3})!} \cdot \\
 & \frac{(n_s-1)!}{(l_s+j_i-n-1)!(n-j_i)!} \cdot \\
 & \frac{(l_s-l-1)!}{(l_s-j_s-l+1)!(j_s-2)!} \cdot \\
 & \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(l_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot \\
 & \frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!} \cdot \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)!(n-j_i)!} \cdot \\
 & \sum_{k=l}^{\binom{()}{j_s=j_{ik}-j_{sa}^{ik}+1}} \sum_{\binom{()}{j_s=j_{ik}-j_{sa}^{ik}+1}} \\
 & \sum_{j_{ik}=j_{sa}^{ik}+j_{sa}^{ik}-j_{sa}} \sum_{\binom{()}{j^{sa}=j_i+j_{sa}-s}} \sum_{j_i=l_i+n-D}^{l_{ik}+s-l-j_{sa}^{ik}+1}
 \end{aligned}$$

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$$\sum_{n_i=n+k}^n \sum_{(n_{i_s}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{i_s}+j_s-j_{ik}-k_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3} \frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - k_1 - k_2 - k_3 - 2 \cdot j_s)!}{(n_i - n - k_1 - k_2 - k_3)!} \cdot \frac{1}{(n + 2 \cdot j_s + j_{sa} - j_i - j_s \cdot j_{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!} \cdot \frac{(D - n)!}{(D - j_i - n)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} < j^{sa} + j_{sa}^{ik} - j_s \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa}^{ik} - j_s + j_{sa}^{ik} + s - 1 \leq j_i \leq j_{ik} \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa} - j_{sa} > l_{ik} \wedge l_{sa} + j_{sa} - s > l_{sa} \wedge$

$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$

$D \geq n < n \wedge l = k_1 = 0 \wedge$

$j_{sa} < j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} < j_{sa}^{ik} - 1 \wedge j_{sa}^{sa} < j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^{ik}, \dots, k_1, j_{sa}^{ik}, \dots, j_{sa}^{ik}, \dots, k_3, j_{sa}^{ik}\} \wedge$

$s \geq 7 \wedge s \leq s + k \wedge$

$k_z: z \leq 3 \wedge k = k_2 + k_3 \Rightarrow$

$$fz^S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=l_{sa}+n-D)}^{(j_i+j_{sa}-s)} \sum_{j_i=l_i+n-D}^{l_s+s-l}$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_s+1) \\ (n_{i_s}=n+l_k-j_s+1)}} \sum_{\substack{n_{i_s}+j_s-j_{ik}-l_{k_1} \\ n_{ik}=n+l_{k_2}+l_{k_3}-j_{ik}+1}} \\
 & \sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-l_{k_2}) \\ (n_{sa}=n+l_{k_3}-j^{sa}+1)}} \sum_{\substack{n_{sa}+j^{sa}-j_i-l_{k_3} \\ n_s=n-j_i+1}} \\
 & \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \\
 & \frac{(n_{i_s} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{i_s} + j_s - j_{ik} - l_{k_1})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{sa} + j^{sa} - n_s - l_{k_3})!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa})^{j^{sa} - l_{ik}} \cdot (j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{\binom{()}{}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)} \\
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-l+1)} \sum_{j_i=l_s+s-l+1}^{l_i-l+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_s+1) \\ (n_{i_s}=n+l_k-j_s+1)}} \sum_{\substack{n_{i_s}+j_s-j_{ik}-l_{k_1} \\ n_{ik}=n+l_{k_2}+l_{k_3}-j_{ik}+1}}
 \end{aligned}$$

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$$\sum_{(n_{sa}=n+k_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-k_3} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{ik} - k_2)!}$$

$$\frac{(n_{sa} - n_{is} - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_{is} - j_i - k_3)!}$$

$$\frac{(n_s - 1)!}{(n - j_i - 1)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - l_{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} - l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{()} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{()} \sum_{j_i=l_i+n-D}^{l_s+s-l}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3}$$

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$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!} \cdot \frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!} \cdot \frac{(D - l)!}{(D + j_i - n - l_i)! (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa}^{sa}$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s - l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_i+n+j_{sa}-D-s-1)} \sum_{j_i=l_i+n-D}^{l_i-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
 & \frac{(n_s + n - n - 1)!}{(n_s + n - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(n - l - 1)!}{(n - l - 1)! \cdot (j_s - l - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j^{sa} - l_{ik} - j^{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (l_{sa} + j^{sa} - j_{ik} - j^{sa})!} \cdot \\
 & \frac{(l_i + l_{sa} - l_{sa} - s)!}{(j_i + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)} \\
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)}^{(l_{ik}+j_{sa}-l-j_{sa}^{ik}+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i-l+1} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
 \end{aligned}$$

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$$\begin{aligned}
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i - 1)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (n_{sa} + j_{sa}^{lk} - j_{sa} - l_{sa})!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_{sa} - l_{sa} - s)! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)} \\
 & \sum_{j_{ik}=j_{ik}^{l-1}+1}^{l-1} \sum_{(j^{sa}=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2)}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i-l+1} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1)}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{(n_s=n-j_i+1)}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot
 \end{aligned}$$

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$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{j_{ik}=j^{sa}+s-j_{sa}}^{(l_{ik}+j_{sa}-j_{sa}^{ik+1})} \sum_{j_{sa}^{ik}=j_{sa}^{ik+1}}^{(j^{sa}=l_{ik}+j_{sa}-D-s)} \sum_{j_i=j^{sa}+s-j_{sa}}^{(n_i-1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}^{(n_{is}=n+k-j_s+1)} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2}^{(n_s=n_{sa}+j^{sa}-j_i-k_3)} \frac{(n_i + j_s + j_{sa} - j^{sa} - j_i - k_1 - k_2 - k_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - k_1 - k_2 - k_3)!} \cdot \frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j_{sa}, j_i} \sum_{j_s=j_{ik}-j_{sa}^{ik}+1}^{\dots} \sum_{j_{ik}=j_{sa}}^{\dots} \sum_{j_{sa}=j_{sa}^{ik}-n+1}^{\dots} \sum_{j_i=l_i+l+1}^{\dots} \sum_{(j_{sa}^{ik}=n-D)}^{\dots} \sum_{j_i=l_i+n-D}^{\dots} \sum_{n_i=n}^{\dots} \sum_{(n_{is}=n+k_1+1)}^{\dots} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{\dots} \sum_{(n_{ik}+j_{ik}-j_{sa}^{ik}-k_2)}^{\dots} \sum_{(n_{sa}=n+k_3-j_{sa}^{ik}+1)}^{\dots} \sum_{n_s=n-j_i+1}^{\dots} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa}^{ik} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa}^{ik} - k_2)!} \cdot \frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j_{sa}^{ik} - 1)! \cdot (n_{sa} + j_{sa}^{ik} - n_s - j_i - k_3)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

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$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l}^{()} \sum_{j_s=j_{sa}^{ik}+1}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{i=n+j_{sa}-D}^{(l_s+l-1)}$$

$$\sum_{n_i=n+k}^{(n_i+l-1)} \sum_{n_{is}=n+k-j_s+1}^{(n_{is}+l-1)}$$

$$\sum_{(n_{sa}=n-k_3-j^{sa}+1)}^{(n_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-k_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - k_1 - 1)!}{(k - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!}$$

$$\frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}$$

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$$\begin{aligned}
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{(\quad)} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\quad)} \\
 & \sum_{j_{ik} = j_{sa}^{ik} + 1}^{l_s + j_{sa}^{ik} - l} \sum_{(j^{sa} = l_s + j_{sa} - l + 1)}^{(l_{sa} - l + 1)} \sum_{j_{i_s + s} = j_{sa}}^{l_i - l + 1} \\
 & \sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s)}^{(n_i - j_s + 1)} \sum_{(n_{ik} = n + k_2 + k_3)}^{n_{is} + j_s - k_1} \\
 & \frac{(n_{ik} + j_{ik} - j^{sa} - k_1 - 1)! \cdot (n_{sa} + j^{sa} - j_i - k_2 - 1)!}{(n_{sa} - k_3 - j^{sa} - 1)! \cdot (j_i + 1)!} \\
 & \frac{(n_{is} - n - k_1 - 1)!}{(j_s - 2)! \cdot (n_{is} - j_s + 1)!} \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_i - 1)! \cdot (n_{ik} + j_s - n_{ik} - j_{ik} - k_1)!} \\
 & \frac{(n_{sa} - n_s - k_3 - 1)!}{(j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -
 \end{aligned}$$

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$$\sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{lk}-j_{sa}}^{(l_s+j_{sa}-l)} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)} \sum_{j_i=j^{sa}+s-j_{sa}}^{(\cdot)}$$

$$\sum_{n_i=n+lk}^n \sum_{(n_{is}=n+lk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-lk_1}^{(\cdot)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-lk_2)}^{(\cdot)} \sum_{(n_{sa}=n_{sa}+j^{sa}-j_i)}^{(\cdot)}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - lk_2 - j_{sa} - 2 \cdot j_{sa}^s)!}{(n_i + n - lk_1 - lk_2 - j_{sa} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq 1 \wedge l_s \leq D - n - 1 \wedge$$

$$1 < j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_i + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_i \leq j_i + j_{sa} - j_{sa} \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n - 1 \leq D + j_i + s - n - 1 \wedge$$

$$D > n < n \wedge I = lk > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s \cdot \{j_{sa}^{ik}, lk_1, j_{sa}^{ik}, \dots, lk_2, j_{sa}, \dots, lk_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + lk \wedge$$

$$lk_z: z = 3 \wedge lk = lk_1 + lk_2 + lk_3 \Rightarrow$$

$$\begin{aligned}
 f_{zS}^{\mathcal{S}_{j_s, j_{ik}, j^{sa}, j_i}} &= \sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)} \\
 &\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_i+n+j_{sa}^{ik}-D-s-1} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-l+1)} \sum_{j_i=l_i+n}^{l_i-l+1} \\
 &\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \\
 &\sum_{(n_{ik}+j_{ik}-j^{sa}+j_s-j_i-k_3)}^{(n_{ik}+j_{ik}-j^{sa}+j_s-j_i-k_3)} \\
 &\sum_{(n_{sa}=n+k_3-j_i+1)}^{(n_{sa}=n+k_3-j_i+1)} \sum_{n_s=n-j_i+1}^{(n_{sa}=n+k_3-j_i+1)} \\
 &\frac{(n_s - n_{is} - 1)!}{(j_s - 2)! \cdot (n_{is} + j_s + 1)!} \\
 &\frac{(n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \\
 &\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{ik} - j_{sa} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \\
 &\frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!} \\
 &\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 &\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \\
 &\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \\
 &\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \\
 &\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 &\sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)}
 \end{aligned}$$

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$$\begin{aligned}
 & \sum_{j_{ik} = l_i + n + j_{sa}^{lk} - D - s}^{l_{ik} - l + 1} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{lk})}^{(l_{sa} - l + 1)} \sum_{j_i = j^{sa} + s - j_{sa}}^{l_i - l + 1} \\
 & \sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n + k_2 + k_3 - j_i}^{n_{is} + j_s - j_{ik} - k_1} \\
 & \sum_{(n_{sa} = n + k_3 - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - k_2)} \sum_{n_s = j_i + 1}^{n_{sa} + j^{sa} - j_i} \\
 & \frac{(n_i - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} + 1)!} \cdot \\
 & \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_i - n_{is} - j_{ik} - k_1)!} \cdot \\
 & \frac{(n_{ik} - n_s - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_s - n_{sa} - j^{sa} - k_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_i + j^{sa} - n_s - j_i - k_3)!} \cdot \\
 & \frac{(n_s - 1)!}{(l_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{lk} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{lk} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=l}^{\binom{()}{}} \sum_{(j_s = j_{ik} - j_{sa}^{lk} + 1)}^{\binom{()}{}}
 \end{aligned}$$

$$\sum_{j_{ik} = l_i + n + j_{sa}^{lk} - D - s}^{l_{ik} - l + 1} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{lk})}^{\binom{()}{}} \sum_{j_i = j^{sa} + s - j_{sa}}^{\binom{()}{}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3} (n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - k_1 - k_2 - k_3 - 2 \cdot j_s)! \cdot (n_i - n - k_1 - k_2 - k_3)! \cdot \frac{1}{(n + 2 \cdot j_s + j_{sa} - j_i - k_1 - k_2 - k_3 - 2 \cdot j_s)!} \cdot \frac{(l_i - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!} \cdot \frac{(D - n)!}{(D - j_i - n)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$
 $1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} < j^{sa} + j_{sa}^{ik} - j_s \wedge$
 $j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa}^{ik} - j_s + j_{sa}^{ik} + s - 1 \leq j_i \leq j_{sa}^{ik} \wedge$
 $l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa} - j_{sa} > l_{ik} \wedge l_{sa} + j_{sa} - s > l_{sa} \wedge$
 $D + s - n < l_i \leq D + l_s + s - 1 - 1 \wedge$
 $D \geq n < n \wedge l = k_1 = 0 \wedge$
 $j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$
 $s: \{j_{sa}^i, \dots, k_1, j_{sa}^{ik}, \dots, j_{sa}^s, \dots, k_3, j_{sa}^i\} \wedge$
 $s \geq 7 \wedge s \leq s + k \wedge$
 $k_z: z = 3 \wedge k = k_2 + k_3 \Rightarrow$

$$f_z^S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_i+n+j_{sa}^{ik}-D-s-1} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-l+1)} \sum_{j_i=l_i+n-D}^{l_i-l+1}$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k+l_{k_2}+l_{k_3}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n+l_{k_3}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-l_{k_3}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - l_{k_1})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{sa} + j^{sa} - n_s - l_{k_3})!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa})! \cdot j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +
 \end{aligned}$$

$$\sum_{k=l}^{\binom{()}{}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\binom{()}{}}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i-l+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k+l_{k_2}+l_{k_3}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}}$$

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$$\begin{aligned}
 & \sum_{(n_{sa}=n+l_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-l_3} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - l_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - l_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{ik} - l_2)!} \cdot \\
 & \frac{(n_{sa} - n_{sa} - l_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - l_3)!} \cdot \\
 & \frac{(n_s - 1)!}{(n - j_i - 1)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - l_{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} - l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=l}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()} \\
 & \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j^{sa}+s-j_{sa}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_1} \\
 & \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-l_3}^{()}
 \end{aligned}$$

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$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}$$

$$\frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!}$$

$$\frac{(D - l)!}{(D + j_i - n - l_i)! (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa}^{sa}$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s \leq l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{sa} < j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z \in \{1, 2, 3\} \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fz_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_i+n-D-s)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(l_{sa}-l+1)} \sum_{(j^{sa}=l_{sa}+n-D)} \sum_{j_i=l_i+n-D}^{l_i-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\begin{aligned}
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l - 1)!}{(l_s - l + 1)! \cdot (l - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - 1)!}{(j_{ik} + l_{sa} - j^{sa} - 1)! \cdot (j^{sa} + j_{sa} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(l_i + j_i - l_{sa} - 1)!}{(j^{sa} + l_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D + l_i)!}{(D + l_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{(l_{ik} - l - j_{sa}^{ik} + 2)} \sum_{(j_s = l_i + n - D - s + 1)} \\
 & \sum_{j_{ik} = j_s + j_{sa}^{lk} - 1}^{(l_{sa} - l + 1)} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{lk})} \sum_{j_i = j^{sa} + s - j_{sa}}^{l_i - l + 1} \\
 & \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \\
 & \sum_{(n_{sa} = n + \mathbb{k}_3 - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = n - j_i + 1}^{n_{sa} + j^{sa} - j_i - \mathbb{k}_3} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
 \end{aligned}$$

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$$\begin{aligned}
 & \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa})!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - l_{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(n - l_i - (n - j_i))!} \cdot \\
 & \sum_{k=0}^{(i)} \sum_{i_s=l_i+n-D-s+1}^{(i+2)} \sum_{j_s=j_s+j_{sa}}^{(i)} \sum_{j_{ik}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{(i)} \sum_{j_i=j^{sa}+s-j_{sa}}^{(i)} \\
 & \sum_{i=n+\mathbb{k}}^n \sum_{(n_i=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_i+j_s-j_{ik}-\mathbb{k}_1} \\
 & \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(i)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \\
 & \frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!} \cdot \\
 & \frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

$D \geq n < n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$f_z S_{j_s, j_{sa}, j_{sa}^{ik}, j_i} = \sum_{k=l}^{(l_i+n-D-s)} \sum_{(j_s=2)}^{(l_i+n-D-s)}$$

$$\sum_{(l_{sa}=1)}^{(l_{sa}-1)} \sum_{(l_i=l+1)}^{l_i-l+1}$$

$$\sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{n} \sum_{(j_{sa}=l_{sa}+n-D)}^{n} \sum_{(j_i=l_i+n-D)}^{n}$$

$$\sum_{(n_{is}=n+k-j_s+1)}^{n} \sum_{(n_{ik}=n+k_2+k_3-j_{ik}+1)}^{n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n+k_3-j_{sa}+1)}^{(n_{ik}+j_{ik}-j_{sa}-k_2)} \sum_{(n_s=n-j_i+1)}^{n_{sa}+j_{sa}-j_i-k_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!}$$

$$\frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\begin{aligned}
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - l_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{j_s=l_i+n-D-s}^{l_s-l} \frac{(l_s-l)!}{(j_s+l_i+n-D-s)!} \cdot \\
 & \sum_{j_{ik}=j_s+l_i-l-1}^{l_i-l+1} \frac{(l_i-l+1)!}{(j_{ik}+j_s+l_i-l-1)!} \cdot \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{l_i-l+1} \frac{(l_i-l+1)!}{(j_{sa}+j_{ik}+j_{sa}-j_{sa}^{ik})!} \cdot \\
 & \sum_{n_{ik}=n+l_2+l_3-j_{ik}+1}^n \frac{(n_{ik}+j_s-j_{ik}-l_1)!}{(n_{ik}+j_s-j_{ik}-l_1)!} \cdot \sum_{n_{is}=n+l_1+l_2+l_3-j_{is}+1}^{n_{is}+j_s-j_{is}-l_1} \frac{(n_{is}+j_s-j_{is}-l_1)!}{(n_{is}+j_s-j_{is}-l_1)!} \cdot \\
 & \sum_{n_{sa}=n+l_3-j^{sa}+1}^{(n_{sa}+j^{sa}-j_i-l_3)} \frac{(n_{sa}+j^{sa}-j_i-l_3)!}{(n_{sa}+j^{sa}-j_i-l_3)!} \cdot \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-l_3} \frac{(n_{sa}+j^{sa}-j_i-l_3)!}{(n_{sa}+j^{sa}-j_i-l_3)!} \cdot \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - l_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - l_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - l_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - l_3)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot
 \end{aligned}$$

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$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_i+n-D-s+k)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(j_{sa}=j_{ik}+j_{sa}-j_s)} \sum_{(j_i=j_s+j_{sa}-j_{sa})}$$

$$\sum_{n_i=n+k}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{ik}=j_s-j_{ik}-k_1)}$$

$$\sum_{(n_{sa}=n_{ik}-j^{sa}-k_2)}^{(n_{sa}=n_{ik}-j^{sa}-k_2)} \sum_{(n_{sa}+j^{sa}-j_i-k_3)}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - k_1 - k_2 - k_3 - 2 \cdot j_{sa}^s)!}{(n_i + n - k_1 - k_2 - k_3)!}$$

$$\frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l \leq D - n + 1 \wedge$$

$$D + l_s + s - n = l_i + s \leq l \leq i - 1 \wedge$$

$$1 - j_s \leq j_{sa} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fz \mathcal{S}_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}-l+1} \sum_{(j_{sa}=j_{sa}^{ik}-D)}^{(l_{sa}-l+1)} \sum_{j_i=j_i-n-D}^{l_i-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{is}=j_s-j_{ik}}^{n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{ik}=j_{sa}^{ik}-\mathbb{k}_2)}^{(n_{ik}=j_{sa}^{ik}-\mathbb{k}_2)} \sum_{(j_i=j_i-\mathbb{k}_3)}^{(j_i=j_i-\mathbb{k}_3)}$$

$$\sum_{(n_s=n+\mathbb{k}_3-j_i+1)}^{(n_s=n+\mathbb{k}_3-j_i+1)} \sum_{n_s=n-j_i+1}^{(n_s=n-j_i+1)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i - \mathbb{k}_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j_{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j_{sa} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)}$$

$$\sum_{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}^{(\cdot)} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\cdot)} \sum_{j_i=l_i+n-l-j_{sa}^{ik}+1}^{(\cdot)}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{ik}-k_1}^{(n_{is}-j_s+1)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-k_2)}^{(\cdot)} \sum_{(n_{sa}+j_{sa}-j_i)}^{(\cdot)}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - k_2 - 2 \cdot j_{sa}^s)!}{(n_i + k_1 + k_2 - n_s)!} \cdot \frac{1}{(n + 2 \cdot j_s + j_{sa} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq 1 \wedge l_s \leq D - n - 1 \wedge$$

$$D + l_s + s - l_i + 1 < l \leq l_i - 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} - 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa} \leq j^{sa} \leq j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 \leq l_i \wedge l_i + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + l_s - 1 \leq l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} - j_{sa} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$\begin{aligned}
 f_z S_{j_s, j_{ik}, j^{sa}, j_i} &= \sum_{k=l}^{(\quad)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)} \\
 &\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-l+1)} \sum_{j_i=l_i+n}^{l_i-l+1} \\
 &\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{n_{is}+j_s-j_{ik}-k_1} \\
 &\sum_{(n_{ik}+j_{ik}-j^{sa}+j_i-k_3)}^{(n_{ik}+j_{ik}-j^{sa}+j_i-k_3)} \sum_{(n_{sa}=n+k_3-j^{sa}+1)}^{(n_{sa}=n+k_3-j^{sa}+1)} \sum_{n_s=n-j_i+k_3}^{n_s=n-j_i+k_3} \\
 &\frac{(n_s - n_{is} - 1)!}{(j_s - 2)! \cdot (n_{is} + j_s - 1)!} \\
 &\frac{(n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \\
 &\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{ik} - j_{sa} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \\
 &\frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!} \\
 &\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 &\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \\
 &\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \\
 &\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \\
 &\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \\
 &\sum_{k=l}^{(\quad)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)}
 \end{aligned}$$

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$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)} \sum_{j_i=l_i+n-D}^{l_s+s-l}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{(n_s=n_{sa}+j_s-j_i-k_3)}^{(n_s=n_{sa}+j_s-j_i-k_3)}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - k_1 - k_2 - k_3 - j_{sa}^s)!}{(n_i - n - k_1 - k_2 - k_3)!}$$

$$\frac{(n + j_s - j^{sa} - j_i - 2 \cdot j_{sa}^s)!}{(l_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq n + 1$$

$$D + l_s + s - n - l_i + 1 \leq l - 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} + j_{sa} - s \wedge j^{sa} - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_{sa} + j_s - j_{sa} \wedge l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + j_s - n < l_i \leq D + j_s + s - n - 1 \wedge$$

$$D \geq n < n - l = k > 0 \wedge$$

$$j_{sa}^{ik} - 1 \wedge j_{sa} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$j_{sa}^s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$f_z^S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=2)}$$

$$\begin{aligned}
 & \sum_{j_{ik}=j_s+j_{sa}^{lk}-1} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-l+1)} \sum_{j_i=l_i+n-D}^{l_i-l+1} \\
 & \sum_{n_i=n+lk}^n \sum_{(n_{is}=n+lk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+lk_2+lk_3-j_{ik}-1}^{n_{is}+j_s-j_{ik}-lk_1} \\
 & \sum_{(n_{sa}=n+lk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-lk_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-1} \\
 & \frac{(n_i-1)!}{(j_s-2)!(n_i-n_{is}+1)!} \cdot \\
 & \frac{(n_{is}-n_{ik}-lk_1-1)!}{(j_{ik}-j_s-1)!(n_{is}-n_{ik}-j_{ik}-lk_1)!} \cdot \\
 & \frac{(n_{ik}-n_s-lk_2-1)!}{(j^{sa}-j_{ik}-1)!(n_{ik}+j_s-n_{sa}-j^{sa}-lk_2)!} \cdot \\
 & \frac{(n_{sa}-n_s-lk_3-1)!}{(j_i-n_{sa}-1)! \cdot (n_{ik}+j^{sa}-n_s-j_i-lk_3)!} \cdot \\
 & \frac{(n_s-1)!}{(l_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \\
 & \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \cdot \\
 & \frac{(l_{sa}+j_{sa}^{lk}-l_{ik}-j_{sa})!}{(l_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{lk}-j_{ik}-j_{sa})!} \cdot \\
 & \frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!} \cdot \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} \cdot \\
 & \sum_{k=l}^{(l_{ik}-l-j_{sa}^{lk}+2)} \sum_{(j_s=l_i+n-D-s+1)} \\
 & \sum_{j_{ik}=j_s+j_{sa}^{lk}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{lk})}^{()} \sum_{j_i=j^{sa}+s-j_{sa}}
 \end{aligned}$$

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$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3} \frac{(n_i+2 \cdot j_s+j_{sa}-j^{sa}-j_i-k_1-k_2-k_3-2 \cdot j_s)!}{(n_i-n-k_1-k_2-k_3)!} \cdot \frac{1}{(n+2 \cdot j_s+j_{sa}-j_i-j^{sa})!} \cdot \frac{(l_i-l-1)!}{(l_s-j_s-k_1+1)! \cdot (j_s-k_1)!} \cdot \frac{(D-n)!}{(D-j_i-n)!(n-j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} < j^{sa} + j_{sa}^{ik} - j_s \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa}^{ik} - j_s + j^{sa} + s - j_s \leq j_i \leq j_{ik} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa} - j_{sa} = l_{ik} \wedge j_s + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{s-1}, \dots, k_2, j_{sa}^{s-2}, \dots, k_3, \dots\} \wedge$$

$$s \geq 1 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(j_i+j_{sa}-s)} \sum_{j_i=s+1}^{l_s+s-l}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1}$$

$$\begin{aligned}
 & \sum_{(n_{sa}=n+k_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-k_3} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{ik} - k_2)!} \cdot \\
 & \frac{(n_{sa} - n_{sa} - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!} \cdot \\
 & \frac{(n_s - 1)!}{(n - j_i - 1)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - j_{sa}^{ik} + 1)!}{(j_s + j_{ik} - l_{ik} - 1)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} - l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}^{l_i-l+1} \\
 & \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(l_{sa}-l+1)} \sum_{(j^{sa}=j_{sa}+1)}^{l_i-l+1} \sum_{j_i=l_s+s-l+1}^{l_i-l+1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \\
 & \sum_{(n_{sa}=n+k_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-k_3}
 \end{aligned}$$

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$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
 & \frac{(n_s + j_i - n - 1)!}{(n - l - 1)!} \cdot \\
 & \frac{(n - l - 1)!}{(j_s - l - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - l_s - 1)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_i - l_{sa} - s)!}{(j_i + l_i - j_i - l_s - 1)! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=l}^{(\quad)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)} \\
 & \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\quad)} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\quad)} \sum_{j_i=s+1}^{l_s+s-l} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \\
 & \frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!} \cdot \\
 & \frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!}
 \end{aligned}$$

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$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\}$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$\sum_{k=l}^s \sum_{j_s=2}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(l_s+j_{sa}-l)} \sum_{(j^{sa}=j_{sa}+1)}^{l_i-l+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - l_{sa}^{ik} + 1)!}$$

$$\frac{(l_i + j_{sa} - l_{sa}^{sa})!}{(j^{sa} + l_i - j_i - l_{sa}^{sa})! \cdot (j_i + j_{sa} - l_{sa}^{sa} - s)!}$$

$$\frac{(l_i - l_i)!}{(n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l}^{-l+1} \sum_{(j_s=2)}$$

$$\sum_{j^{sa}+j_{sa}^{sa} \dots} \sum_{(l_s+j_{sa}-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}^{sa}}$$

$$\sum_{n+l_{\mathbb{k}} (n_{is}=n+l_{\mathbb{k}}-j_s+1)} \sum_{n_{ik}=n+l_{\mathbb{k}_2}+l_{\mathbb{k}_3}-j_{ik}+1} \sum_{(n_i-j_s+1)} \sum_{n_{is}+j_s-j_{ik}-l_{\mathbb{k}_1}}$$

$$\sum_{(n_{sa}=n+l_{\mathbb{k}_3}-j^{sa}+1)} \sum_{n_s=n-j_i+1} \sum_{(n_{ik}+j_{ik}-j^{sa}-l_{\mathbb{k}_2})} \sum_{n_{sa}+j^{sa}-j_i-l_{\mathbb{k}_3}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

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$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{j_s = j_{ik} - j_{sa}^{ik}}$$

$$\sum_{j_{ik} = j_s + j_{sa}^{ik} - j_{sa}^{ik}} \sum_{j_i = j_s + j_{sa}^{ik} - j_{sa}^{ik} + s - j_{sa}^{ik}}$$

$$\sum_{n + k_1}^n \sum_{n_{is} = n + j_s + 1}^{j_s + 1} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - k_1}$$

$$\sum_{n_{sa} = n_{ik} + j_{ik} - j^{sa} - k_2} \sum_{n_s = n_{sa} + j^{sa} - j_i - k_3}$$

$$\frac{(n_i + j_i + j_s - j^{sa} - j_i - k_1 - k_2 - k_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - k_1 - k_2 - k_3)!}$$

$$\frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_{z^S} S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=l}^{(j_{ik}-j_{sa}^{ik})} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik})} \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-l} \sum_{(j_{sa}=j_{ik}+1)}^{(l_i+1)} \sum_{j_i=j_{sa}+s}^{(l_i+1)} \sum_{n_i=n_s}^{(n_{is}=n+\mathbb{k}_1+1)} \sum_{n_{ik}=n+j_{ik}+1}^{(n_{is}-j_{ik}-\mathbb{k}_1)} \sum_{(n_{sa}=n-\mathbb{k}_3-j_{sa}+1)}^{(n_{sa}+j_{ik}-j_{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{(n_{sa}+j_{sa}-j_i-\mathbb{k}_3)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j_{sa}^{ik} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j_{sa}^{ik} - s)!}$$

$$\begin{aligned}
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{(l_s - l + 1)} \sum_{(j_s=2)} \\
 & \sum_{j_{ik}=l_s + j_{sa}^{ik} - l + 1}^{l_{ik} - l + 1} \sum_{(j^{sa}=j_{ik} + j_{sa} - j_{sa}^{ik})} \sum_{(j_{sa}^{sa} + s - j_{sa})}^{l_i - l + 1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_{sa}^{ik})}^{(n_i - j_s + 1)} \sum_{(n_{ik}=n+k_2)}^{n_{is} + j_s - k_1} \\
 & \frac{(n_{ik} + j_{ik} - j_{sa}^{ik})! \cdot (n_{sa} + j_{sa} - j_i - k_1)!}{(n_{sa} + k_3 - j_{sa}^{ik})! \cdot (n_{sa} - j_i + 1)!} \cdot \frac{(n_{is} - 1)!}{(j_s - 2)! \cdot (n_{is} - j_s + 1)!} \\
 & \frac{(n_{is} - k_1 - 1)!}{(j_{ik} - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{sa}^{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \\
 & \frac{(n_{sa} - n_s - k_3 - 1)!}{(j^{sa} - j_{sa}^{ik} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

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$$\sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\cdot)} \sum_{j_i=j^{sa}+s-}^{(\cdot)}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{ik}-l_{k_1}}^{(\cdot)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{(\cdot)} \sum_{(n_{is}=n_{sa}+j^{sa}-j_i)}^{(\cdot)}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - l_{k_2} - \dots - 2 \cdot j_{sa}^s)!}{(n_i - l_{k_1} - l_{k_2} - \dots - l_{k_3} - \dots)!}$$

$$\frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq 1 \wedge l_i \leq D + s - 1 \wedge$$

$$1 < j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_{sa}^{ik} + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - 1 \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa}^{ik} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n - l = l_k > 1 \wedge$$

$$j_{sa}^{ik} - j_{sa}^{ik} + 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \dots, l_{k_2}, j_{sa}, \dots, l_{k_3}, j_{sa}^i\} \wedge$$

$$s \geq 1 \wedge s = s + l_k \wedge$$

$$l_{k_z}: z = 3 \wedge l_k = l_{k_1} + l_{k_2} + l_{k_3} \Rightarrow$$

$$f^z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}^{(\cdot)}$$

$$\begin{aligned}
 & \sum_{j_{ik}=j_s+j_{sa}^{lk}-1}^{l_{ik}-l+1} \binom{(\quad)}{\quad} \sum_{j_i=j_{sa}^{lk}+s-j_{sa}}^{l_i-l+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k+l_2+l_3-j_i}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n+l_k+l_3-j_{sa}+1)}^{(n_{ik}+j_{ik}-j_{sa}-l_{k_2})} \sum_{n_s=j_i+1}^{n_{sa}+j_{sa}-j_i} \\
 & \frac{(n_i-1)!}{(j_s-2)!(n_i-n_{is}+1)!} \cdot \\
 & \frac{(n_{is}-n_{ik}-l_{k_1}-1)!}{(j_{ik}-j_s-1)!(n_{is}+j_s-n_{ik}-j_{ik}-l_{k_1})!} \cdot \\
 & \frac{(n_{ik}-n_{sa}-l_{k_2}-1)!}{(j_{sa}-j_{ik}-1)!(n_{ik}+j_{ik}-n_{sa}-j_{sa}-l_{k_2})!} \cdot \\
 & \frac{(n_{sa}-n_s-l_{k_3}-1)!}{(j_i-j_{sa}-1)!(n_{sa}+j_{sa}-n_s-j_i-l_{k_3})!} \cdot \\
 & \frac{(n_s-1)!}{(l_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \\
 & \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \cdot \\
 & \frac{(l_{ik}-l_s-j_{sa}^{lk}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{lk}+1)!} \cdot \\
 & \frac{(l_i+j_{sa}-l_{sa}-s)!}{(j_{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j_{sa}-s)!} \cdot \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} \cdot \\
 & \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}
 \end{aligned}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{lk}-1} \binom{(\quad)}{\quad} \sum_{j_i=j_{sa}^{lk}+s-j_{sa}}$$

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$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{i_s}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{i_s}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\cdot)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!} \cdot \frac{1}{(n + 2 \cdot j_s + j_{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - \mathbb{k}_1 + 1)! \cdot (j_s - \mathbb{k}_1)!} \cdot \frac{(D - n)!}{(D - j_i - n)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} < j^{sa} + j_{sa}^{ik} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa}^{ik} - j_{sa}^{ik} + s - 1 \leq j_i \leq j_{sa}^{ik} + 1 \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_{sa} + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} = 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^i, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, j_{sa}^s, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s \leq s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fz_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}^{(j_s=2)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j_i+j_{sa}-s)}^{(j_i+j_{sa}-s)} \sum_{(j_i=l_i+n-D)}^{l_s+s-l}$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k+l_{k_2}+l_{k_3}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n+l_{k_3}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-l_{k_3}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - l_{k_1})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{sa} + j^{sa} - n_s - l_{k_3})!} \cdot \\
 & \frac{(n_s - 1)!}{(n_{sa} + j_i - n_s - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s - j_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +
 \end{aligned}$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-l+1)} \sum_{j_i=l_s+s-l+1}^{l_i-l+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k+l_{k_2}+l_{k_3}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}}$$

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$$\begin{aligned}
 & \sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-k_2) \\ (n_{sa}=n+k_3-j^{sa}+1)}} \sum_{\substack{n_{sa}+j^{sa}-j_i-k_3 \\ n_s=n-j_i+1}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{ik} - k_2)!} \cdot \\
 & \frac{(n_{sa} - n_{sa} - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!} \cdot \\
 & \frac{(n_s - 1)!}{(n - j_i - 1)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - j_{ik} - j_{sa}^{ik} + 1)!}{(j_s + j_{ik} - j_{sa}^{ik} - l_{ik} - 1)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} - l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=l}^{(\quad)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)} \\
 & \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\quad)} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\quad)} \sum_{j_i=l_i+n-D}^{l_s+s-l} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1} \\
 & \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{(\quad)} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3}
 \end{aligned}$$

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$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}$$

$$\frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!}$$

$$\frac{(D - l)!}{(D + j_i - n - l_i)! (n - j_i)!}$$

$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa}^{sa}$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s - l_{sa} \wedge$

$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$

$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{ik} - 1$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 7 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$fz^S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j^{sa} + j_{sa}^{ik} - j_{sa}}^{(l_i + n + j_{sa} - D - s - 1)} \sum_{(j^{sa}=l_{sa} + n - D)}^{l_i - l + 1} \sum_{j_i=l_i + n - D}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
 & \frac{(n_s + j_i - n - 1)!}{(n_s + j_i - n - 1)!} \cdot \frac{(n - l - 1)!}{(n - l - 1)!} \cdot \frac{(j_s - l - 1)!}{(j_s - l - 1)!} \cdot (j_s - 2)! \cdot \\
 & \frac{(l_{ik} - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{sa}^{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_i - j_{sa} - l_{sa} - s)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)} \\
 & \sum_{j_{ik}=j^{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j^{sa}=l_i + n + j_{sa} - D - s)} \sum_{j_i=j^{sa} + s - j_{sa}}^{(l_s + j_{sa} - l)} \sum_{j_i=l-1}^{l_i - l + 1} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i - j_s + 1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \\
 & \sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa} + j^{sa} - j_i - \mathbb{k}_3} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
 \end{aligned}$$

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$$\begin{aligned}
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i - 1)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j^{sa} - 1)!}{(j_s + l_{ik} - j_{ik} - l_s - j^{sa} - 1)! \cdot (j_{ik} - j_s - l + 1)!} \cdot \\
 & \frac{(l_i + j_{sa} - l_s - j^{sa} - s)!}{(j^{sa} + l_i - j_s - l + 1)! \cdot (j_i + j_s - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i - 1)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{(l_s - l + 1)} \sum_{(j_s=2)}^{(l_s - l + 1)} \\
 & \sum_{j_{ik}=j_s+l-j^{sa}-j_{sa}}^{(l_{sa}-l+1)} \sum_{(j^{sa}=l_s+j_{sa}-l+1)}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i-l+1} \\
 & \sum_{n_i=n+l_{\mathbb{k}}}^n \sum_{(n_{is}=n+l_{\mathbb{k}}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_{\mathbb{k}_2}+l_{\mathbb{k}_3}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{\mathbb{k}_1}} \\
 & \sum_{(n_{sa}=n+l_{\mathbb{k}_3}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_{\mathbb{k}_2})} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-l_{\mathbb{k}_3}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot
 \end{aligned}$$

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$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

GÜLDÜNKYA

$$fz^S j_s, j_{ik}, j_{sa}^{ik} = \sum_{l=1}^{k+1} \sum_{(j_s=2)}^{l-1+1} \sum_{j_{ik}=l_{ik}+n}^{n+j_{sa}^{ik}-D-s} \sum_{(j_{sa}=j_{sa}^i-j_{sa}-j_{sa}^{ik})}^{l_i-l+1} \sum_{j_i=l_i+n-D}^{n} \sum_{(n_i=n-1)}^{(n_i=n-1)} \sum_{n_{is}=n+k_2+1}^{n_{is}=n+k_2+1} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_{ik}+j_{ik}-j_{sa}-k_2)}^{(n_{sa}+j_{sa}-j_i-k_3)} \sum_{(n_{sa}=n+k_3-j_{sa}+1)} \sum_{n_s=n-j_i+1} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!} \cdot \frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i - k_3)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l}^{j_{ik} - j_{sa}^{ik} + 1} \sum_{s=2}^{j_{ik} - j_{sa}^{ik} + 1} \sum_{j_{ik} = l_i + n + j_{sa}^{lk} - D}^{l_s + j_{sa}^{lk} - l} \sum_{j_{ik} + j_{sa} - j_s = j^{sa} + s - j_{sa}} \sum_{n_i = n + k}^{(n_i - j_s + 1) - k_1} \sum_{n_{is} = n + k_2 + k_3 - j_{ik} + 1}^{(n_{is} - j_s - 1) - k_1} \sum_{n_{ik} = n_{sa} - j^{sa} - k_2}^{(n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2) - k_1} \sum_{n_s = n - j_i + 1}^{(n_{sa} - k_3 - j^{sa} + 1) - k_1} \sum_{n_s = n - j_i + 1}^{(n_s - j_i + 1) - k_1}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!}$$

$$\frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

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$$\begin{aligned}
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{(l_s - l + 1)} \sum_{j_s=2}^{(l_s - l + 1)} \\
 & \sum_{j_{ik}=l_s + j_{sa}^{ik} - l + 1}^{l_{ik} - l + 1} \sum_{(j^{sa} = j_{ik} + j_{sa} - j^{sa} - j_{sa})}^{(j^{sa} = j_{ik} + j_{sa} - j^{sa} - j_{sa})} \\
 & \sum_{n_i=n+k}^n \sum_{(n_i - j_s + 1)}^{(n_i - j_s + 1)} \sum_{(n_{is} + j_s - j_{ik})}^{(n_{is} + j_s - j_{ik})} \\
 & \sum_{(n_{ik} = n + k_3 - j_{ik} + 1)}^{(n_{ik} = n + k_3 - j_{ik} + 1)} \sum_{(n_{ik} = n + k_3 - j_{ik} + 1)}^{(n_{ik} = n + k_3 - j_{ik} + 1)} \\
 & \sum_{(n_{ik} = n + k_3 - j_{ik} + 1)}^{(n_{ik} = n + k_3 - j_{ik} + 1)} \sum_{(n_s = n - j_i + 1)}^{(n_s = n - j_i + 1)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -
 \end{aligned}$$

GÜLDENYA

$$\sum_{k=l}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{lk}-D-s}^{l_s+j_{sa}^{lk}-l} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j_{sa}+s-}^{()}$$

$$\sum_{n_i=n+lk}^n \sum_{(n_{is}=n+lk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{ik}-lk_1}^{()}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-lk_2)}^{()} \sum_{(n_{sa}+j_{sa}-j_i)}^{()}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j_{sa}^{lk} - lk_2 - \dots - 2 \cdot j_{sa}^s)!}{(n_i - lk_1 - lk_2 - \dots - lk_3 - \dots - 2 \cdot j_{sa}^s)!}$$

$$\frac{1}{(n + 2 \cdot j_s + j_{sa} - j_{sa}^{lk} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq 1 \wedge l_s \leq D - n - 1 \wedge$$

$$1 < j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_{sa}^{lk} + j_{sa}^{lk} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{lk} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{lk} \leq j_{sa} \leq j_i + j_{sa} \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{lk} + 1 > l_s \wedge l_{sa}^{lk} - j_{sa}^{lk} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < \dots \leq D + j_s + s - n - 1 \wedge$$

$$D > n \wedge I = lk > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{lk} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{lk} - 1 \wedge$$

$$s: \{j_{sa}, \dots, lk_1, j_{sa}^{lk}, \dots, lk_2, j_{sa}, \dots, lk_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + lk \wedge$$

$$lk_z: z = 3 \wedge lk = lk_1 + lk_2 + lk_3 \Rightarrow$$

$$\begin{aligned}
 f_z S_{j_s, j_{ik}, j_{sa}, j_i} &= \sum_{k=l}^{(l_i+n-D-s)} \sum_{(j_s=2)}^{(l_i+n-D-s)} \\
 &\sum_{j_{ik}=l_{ik}-l+1}^{l_{ik}-l+1} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=l_i+n-D}^{l_i-l+1} \\
 &\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \\
 &\frac{(n_{ik}+j_{ik}-j_{sa}^{ik})! \cdot (n_{sa}+j_{sa}-j_i-k_3)!}{(n_{sa}=n+k_3-j_{sa}^{ik}+1)! \cdot (n_s=n-j_i-k_3)!} \cdot \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_{is}+j_s+1)!} \\
 &\frac{(n_{is}-n_{ik}-k_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-k_1)!} \cdot \frac{(n_{ik}-n_{sa}-k_2-1)!}{(n_{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j_{sa}-k_2)!} \\
 &\frac{(n_{sa}-n_s-k_3-1)!}{(j_i-n_{sa}-1)! \cdot (n_{sa}+j_{sa}-n_s-j_i-k_3)!} \cdot \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \\
 &\frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \cdot \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \\
 &\frac{(l_i+j_{sa}-l_{sa}-s)!}{(j_{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j_{sa}-s)!} \cdot \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \\
 &\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-l+1)}
 \end{aligned}$$

GÜLDENYA

$$\sum_{j_{ik}=j_s+j_{sa}^{lk}-1}^{l_{ik}-l+1} \binom{()}{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{lk}} \sum_{j_i=j_{sa}+s-j_{sa}}^{l_i-l+1}$$

$$\sum_{n_i=n+l}^n \sum_{(n_{is}=n+l-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_2+l_3-j_i}^{n_{is}+j_s-j_{ik}-l_1}$$

$$\sum_{(n_{sa}=n+l_3-j_{sa}+1)}^{(n_{ik}+j_{ik}-j_{sa}-l_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j_{sa}-j_i}$$

$$\frac{(n_i-1)!}{(j_s-2)! \cdot (n_i-n_{is}+1)!}$$

$$\frac{(n_{is}-n_{ik}-l_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}-n_{ik}-j_{ik}-l_1)!}$$

$$\frac{(n_{ik}-n_{sa}-l_2-1)!}{(j_{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{sa}-n_{sa}-j_{sa}-l_2)!}$$

$$\frac{(n_{sa}-n_s-l_3-1)!}{(j_i-j_{sa}-1)! \cdot (n_{sa}+j_{sa}-n_s-j_i-l_3)!}$$

$$\frac{(n_s-1)!}{(l_s+j_i-n-1)! \cdot (n-j_i)!}$$

$$\frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!}$$

$$\frac{(l_{ik}-l_s-j_{sa}^{lk}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{lk}+1)!}$$

$$\frac{(l_i+j_{sa}-l_{sa}-s)!}{(j_{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j_{sa}-s)!}$$

$$\frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!}$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_i+n-D-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{lk}-1} \binom{()}{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{lk}} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{(\cdot)} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3} \frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - k_1 - k_2 - k_3 - 2 \cdot j_s)!}{(n_i - n - k_1 - k_2 - k_3)!} \cdot \frac{1}{(n + 2 \cdot j_s + j_{sa} - j_i - j_s \cdot j^{sa})!} \cdot \frac{(l_i - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!} \cdot \frac{(D - l)!}{(D - j_i - n - l + 1)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$
 $D + l_s + s - n - l_i + 1 \leq l \leq i \wedge l - 1 \wedge$
 $1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} + j_{sa}^{ik} - 1 \wedge$
 $j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + j_{sa} - j_{sa} \leq j_i \leq n \wedge$
 $l_{ik} - j_{sa}^{ik} + 1 > l \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_{sa} + j_{sa} - s > l_{sa} \wedge$
 $D + s - n < l_i \leq D - l_s + s - n - 1$
 $D \geq n < n \wedge l > 0$
 $j_{sa} < j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa} < j_{sa}^{ik} - 1 \wedge$
 $s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \dots, k_1, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$
 $s \geq 7, s = s + 1$
 $k_z: z = 3, k_z = k_1 + k_2 + k_3 \Rightarrow$

$$f_z^S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}^{(l_s-l+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(l_{sa}-l+1)} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_i-l+1)} \sum_{j_i=l_i+n-D}$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_s+1) \\ (n_{i_s}=n+l_k-j_s+1)}} \sum_{\substack{n_{i_s}+j_s-j_{ik}-l_{k_1} \\ n_{ik}=n+l_{k_2}+l_{k_3}-j_{ik}+1}} \\
 & \sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-l_{k_2}) \\ (n_{sa}=n+l_{k_3}-j^{sa}+1)}} \sum_{\substack{n_{sa}+j^{sa}-j_i-l_{k_3} \\ n_s=n-j_i+1}} \\
 & \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \\
 & \frac{(n_{i_s} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{i_s} + j_s - j_{ik} - l_{k_1})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{i_s} + j^{sa} - n_s - l_{k_3})!} \cdot \\
 & \frac{(n_s - 1)!}{(n_i + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_i - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + j_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=l}^{\binom{D}{k}} \sum_{\substack{(\cdot) \\ (j_s=j_{ik}-j_{sa}^{ik}+1)}} \\
 & \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{\substack{(\cdot) \\ (j^{sa}=j_i+j_{sa}-s)}} \sum_{j_i=l_i+n-D}^{\binom{D}{j_i}} \sum_{l_s+s-l} \\
 & \sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_s+1) \\ (n_{i_s}=n+l_k-j_s+1)}} \sum_{n_{ik}=n_{i_s}+j_s-j_{ik}-l_{k_1}}
 \end{aligned}$$

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$$\frac{\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3} \binom{(\quad)}{\quad}}{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - k_1 - k_2 - k_3 - 2 \cdot j_{sa}^s)!} \cdot \frac{1}{(n_i - n - k_1 - k_2 - k_3)!}$$

$$\frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - 1)!}{(D + j_s - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l \neq i \wedge l_i \leq D + s - n \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = j_{sa} \wedge$

$D \geq n < n \wedge I = k > 0 \wedge$

$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

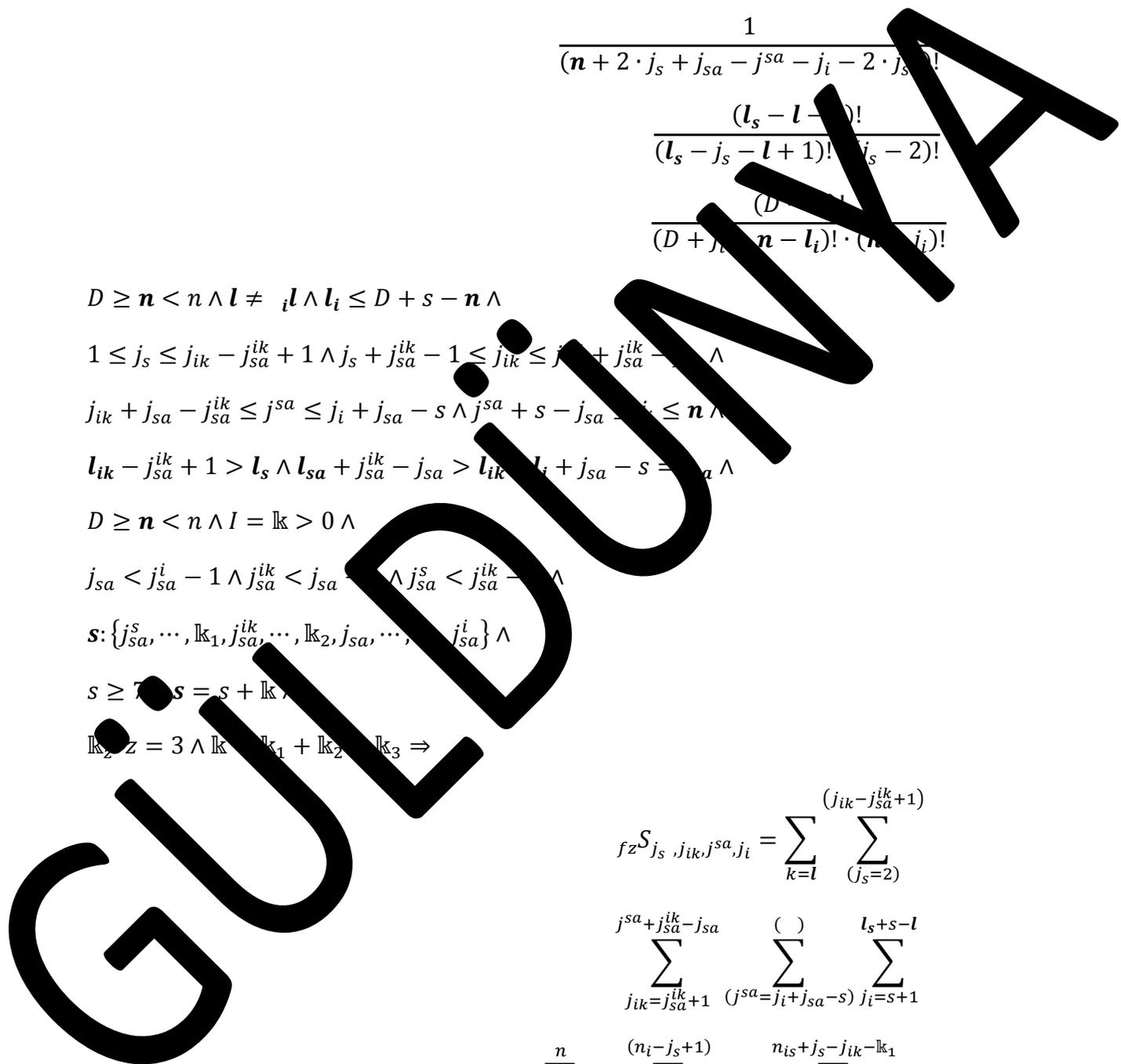
$s \geq 7 \wedge s = s + k$

$k_2 \cdot z = 3 \wedge k_1 + k_2 + k_3 \Rightarrow$

$$fz^{S_{j_s, j_{ik}, j^{sa}, j_i}} = \sum_{k=l}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)} \sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \binom{(\quad)}{(j^{sa}=j_i+j_{sa}-s)} \sum_{j_i=s+1}^{l_s+s-l}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n+k_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-k_3}$$



$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
 & \frac{(n_s - n - 1)!}{(n_s + j_i - n - 1)!} \cdot \\
 & \frac{(n_s - l - 1)!}{(n_s + j_i - l - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - j_{sa}^{ik} - 1)!}{(j_s + l_{ik} - j_{sa}^{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_{sa} + j_s - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{(l_s - l + 1)} \sum_{(j_s=2)} \\
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}-l+1} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{()} \sum_{j_i=l_s+s-l+1}^{l_i-l+1} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
 \end{aligned}$$

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$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i - 1)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j^{sa} - 1)!}{(j_s + l_{ik} - j_{ik} - l_s - j^{sa} - 1)! \cdot (j_{ik} - j_s - j^{sa} + 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - 1)!}{(j_{ik} + l_{sa} - j^{sa} - j_{sa}^{ik} - 1)! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l}^{()} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j^{sa} = j_i + j_{sa} - s)} \sum_{j_i = s+1}^{l_s + s - l}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{()} \sum_{n_s = n_{sa} + j^{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}$$

$$\frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, j_{sa}^{ik}, j_{sa}, j_i} = \sum_{k=l}^{j_{ik} - j_{sa}^{ik} + 1} \sum_{(j_s=2)}^{j_{sa} + j_{sa}^{ik}} \sum_{(l_s + j_{sa})}^{(l_{ik} + j_{sa} - s)} \sum_{(j_i = j^{sa} + s - j_{sa})}^{(n_{is} + j_s - j_{ik} - \mathbb{k}_1)} \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_{ik} = n + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1)} \sum_{(n_{sa} = n + \mathbb{k}_3 - j^{sa} + 1)}^{(n_s = n - j_i + 1)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\begin{aligned}
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=l}^{l+1} \sum_{j_s=j_s}^{j_s+l+1} \sum_{j_{ik}=j_{ik}-l+1}^{l_{ik}-l+1} \sum_{j_i=j_i-l+1}^{j_i+l+1} \sum_{j_{sa}=j_{sa}-l+1}^{j_{sa}+1} \sum_{j_s=j_s-l+1}^{j_s+l+1} \\
 & \sum_{n_i=n_i+l-k}^n \sum_{n_{is}=n_{is}+k}^{(n_{is}+1)} \sum_{n_{ik}=n_{ik}+k_1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{n_{sa}=n_{sa}+k_2}^{n_{is}+j_s-j_{ik}-k_2} \\
 & \sum_{n_s=n_s+k_3}^{(n_{sa}+k_3-j^{sa}+1)} \sum_{n_s=n_s+k_3-j_{ik}+1}^{n_{sa}+j^{sa}-j_i-k_3} \\
 & \sum_{n_s=n_s+k_3-j^{sa}+1}^{(n_{sa}+k_3-j^{sa}+1)} \sum_{n_s=n_s+k_3-j_i+1}^{n_{sa}+j^{sa}-j_i-k_3} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot
 \end{aligned}$$

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$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()} \sum_{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}^{(l_s+j_{sa}-l)} \sum_{(j_{sa}=j_{sa}+1)}^{(j_{sa}-j_{sa})} \sum_{n_i=n+k}^n \sum_{(n_i=n+k)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n_i-k_1)}^{(n_{ik}=n_i-k_2)} \sum_{(n_{sa}=n_{ik}+j_{sa}-k_2)}^{(n_{sa}=n_{sa}+j_{sa}-j_i-k_3)} \frac{(n_i + 2 \cdot j_s + j_{sa} - j_{sa} - j_i - k_2 - k_3 - 2 \cdot j_{sa}^s)!}{(n_i - k_1 - k_2 - k_3)!} \cdot \frac{1}{(n + 2 \cdot j_s + j_{sa} - j_{sa} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

- $D \geq n < n \wedge l \neq l_i \wedge l \leq D + s - n \wedge$
- $1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$
- $j_{ik} + j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$
- $l_{ik} - j_{sa}^{ik} > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$
- $D \geq n < n \wedge l = k > 0 \wedge$
- $j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$
- $s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$
- $s \geq 7 \wedge s = s + k \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{(l_s-l+1)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_1}^{n_{is}+j_s-\mathbb{k}-\mathbb{k}_1} \sum_{n_{ik+1}=n+\mathbb{k}_1}^{n_{ik}+\mathbb{k}_2}$$

$$\sum_{(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)}^{(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)} \sum_{(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)}^{(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)}$$

$$\frac{(n_i - n_{is})}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}^{(l_s-l+1)}$$

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$$\begin{aligned}
 & \sum_{j_{ik}=l_s+j_{sa}^{ik}-l+1}^{l_{ik}-l+1} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_{sa}-l+1)} \sum_{j_i=j_{sa}+s-j_{sa}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k+l_3-j_i}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n+l_k+l_3-j_{sa}+1)}^{(n_{ik}+j_{ik}-j_{sa}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{sa}+j_{sa}-j_i-l_{k_2}} \\
 & \frac{(n_i-1)!}{(j_s-2)!(n_i-n_{is}+1)!} \cdot \\
 & \frac{(n_i-n_{ik}-l_{k_1}-1)!}{(j_{ik}-j_s-1)!(n_i-n_{is}-j_{ik}-l_{k_1})!} \cdot \\
 & \frac{(n_{ik}-n_{is}-l_{k_2}-1)!}{(j_{sa}-j_{ik}-1)!(n_{ik}+j_{sa}-n_{sa}-j_{sa}-l_{k_2})!} \cdot \\
 & \frac{(n_{sa}-n_s-l_{k_3}-1)!}{(j_i-n_{sa}-1)!(n_i+j_{sa}-n_s-j_i-l_{k_3})!} \cdot \\
 & \frac{(n_s-1)!}{(l_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \\
 & \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \cdot \\
 & \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \cdot \\
 & \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j_{sa}-l_{ik})! \cdot (j_{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} \cdot \\
 & \sum_{k=l}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}
 \end{aligned}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-l} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{(\)} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - k_1 - k_2 - k_3 - 2 \cdot j_s)!}{(n_i - n - k_1 - k_2 - k_3)!}$$

$$\frac{1}{(n + 2 \cdot j_s + j_{sa} - j_i - j^{sa} \cdot j_{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - 1)! \cdot (j_s - 1)!}$$

$$\frac{(D - 1)!}{(D - j_i - n - j_i)!}$$

$D \geq n < n \wedge l \neq i \wedge l_i \leq D + s - n \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} < j^{sa} + j_{sa}^{ik} - j_i \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa}^{ik} + s - 1 \leq j_i \leq j_{ik} \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa} - j_{sa} > l_{ik} \wedge j_{sa} - s = l_{sa} \wedge$

$D \geq n < n \wedge l = k > 0 \wedge$

$j_{sa} < j_{sa} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa} - 1 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^s, \dots, k_2, j_{sa}^s, \dots, k_3, \dots\} \wedge$

$s \geq 1 \wedge s = s + k \wedge$

$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$

$$f^z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{l_{ik}-l+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1}$$

$$\frac{\sum_{(n_{sa}=n+l_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-l_3}}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-l_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-l_1)!} \cdot \frac{(n_{ik}-n_{sa}-l_2-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j_{ik}-l_2)!} \cdot \frac{(n_{sa}-n_{sa}-l_3-1)!}{(j_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-l_3)!} \cdot \frac{(n_s-1)!}{(n-j_i)!} \cdot \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \cdot \frac{(l_{ik}-j_{ik}-j_{sa}^{ik}+1)!}{(j_s+l_{sa}-j_{ik}-l_{ik})! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \cdot \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!}$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+l_3}^n \sum_{(n_{is}=n+l_3-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-l_3}$$

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$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}$$

$$\frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!}$$

$$\frac{(D - l)!}{(D + j_i - n - l_i)! (n - j_i)!}$$

$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa}^{sa}$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s - l_{sa} \wedge$

$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$

$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{ik} - 1$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 7 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_2: z \geq 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$fz^S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)} \sum_{j_i=l_i+n-D}^{l_s+s-l}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
 & \frac{(n_s - n - 1)!}{(n_s + j_i - n - 1)!} \cdot \frac{(n - l - 1)!}{(n - j_s - l - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - j_{sa}^{ik} - 1)!}{(j_s + l_{ik} - j_{sa}^{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_{sa} + j_s - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{(l_s - l + 1)} \sum_{(j_s=2)} \\
 & \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-l+1} \sum_{(j^{sa}=j_i+j_{sa}-s)} \sum_{j_i=l_s+s-l+1}^{l_i-l+1} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
 \end{aligned}$$

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$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i - 1)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j^{sa} - 1)!}{(j_s + l_{ik} - j_{ik} - l_s - j^{sa} - 1)! \cdot (j_{ik} - j_s - j^{sa} + 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - 1)!}{(j_{ik} + l_{sa} - j^{sa} - j_{sa}^{ik} - 1)! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{k=j^{sa}+j_{sa}^{ik}-j_{sa}}^{()} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{()} \sum_{j_i=l_i+n-D}^{l_s+s-l}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}$$

$$\frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

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$$D \geq n < n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$f_{z=3}(j_{ik}, j_{sa}^{ik}, j_{sa}) = \sum_{k=l}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)}^{(j_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik} = k + n - D}^{j_{sa}^{ik} - k - j_{sa}} \sum_{(j_s = l)}^{(l_s = j_{sa} - l)} \sum_{j_i = j_{sa} + s - j_{sa}}$$

$$\sum_{i=n+k}^{(n_i - j_s + 1)} \sum_{(n_{is} = n + k - j_s + 1)}^{(n_{is} + j_s - j_{ik} - k_1)}$$

$$\sum_{(n_{sa} = n + k_3 - j_{sa} + 1)}^{(n_{ik} + j_{ik} - j_{sa} - k_2)} \sum_{n_s = n - j_i + 1}^{n_{sa} + j_{sa} - j_i - k_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!}$$

$$\frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{sa})!}$$

$$\frac{(D + j_i - n - l_i)! \cdot (n - j_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{j_s=2}^{l_s-l+1} \sum_{j_i=l_{ik}+n-D}^{l_{ik}-l} \sum_{j_i=j^{sa}+s-j_{sa}}^{(l_i+j_{sa}^{ik}-s+1)}$$

$$\sum_{j_i=n+l_k}^{(n_i-j_s)} \sum_{n_{is}=n+l_k-j_s+1}^{n_{is}+j_s-j_{ik}-l_{k_1}}$$

$$\sum_{n_{sa}=n+l_{k_3}-j^{sa}+1}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-l_{k_3}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - l_{k_1})!}$$

$$\frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!}$$

$$\frac{(n_{sa} - n_s - l_{k_3} - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - l_{k_3})!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

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$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \sum_{j_s=j_{ik} - j_{sa}^{ik} + 1}^{(j_s)} \sum_{j_{ik}=j^{sa} + j_{sa}^{ik} - j_{sa}}^{(l_s + j_s - D)} \sum_{j_{sa}=j^{sa} + s - j_{sa}}^{(n + j_{sa} - D - j_s)} \sum_{n_i=n+k}^{(n-k_1-k_2-k_3)} \sum_{n_s=n_{sa} + j^{sa} - j_i - k_3}^{(n-k_1-k_2-k_3)} \frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - k_1 - k_2 - k_3 - 2 \cdot j_{sa}^s)!}{(n - n - k_1 - k_2 - k_3)!} \cdot \frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D - n < l \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=l}^{(j_{ik}-j_{sa}^{ik})} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik})}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_i+n+j_{sa}^{ik}-D-s-1} \sum_{(j_{sa}=l_i+n+D-s)}^{(l_i+j_{sa}-l-s)} \sum_{j_i=j_{sa}+s}^{(j_i+1)}$$

$$\sum_{n_i=n}^{n} \sum_{(n_{is}=n+l_{ik}+1)}^{(n_i+1)} \sum_{n_{ik}=n}^{n} \sum_{(n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(n_{sa}+j_{sa}-j_i-\mathbb{k}_3)}$$

$$\sum_{(n_{sa}=n_{ik}-j_{sa}+1)}^{(n_{sa}+j_{sa}-j_i-\mathbb{k}_3)} \sum_{n_s=n-j_i+1}^{(n_s+1)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!}$$

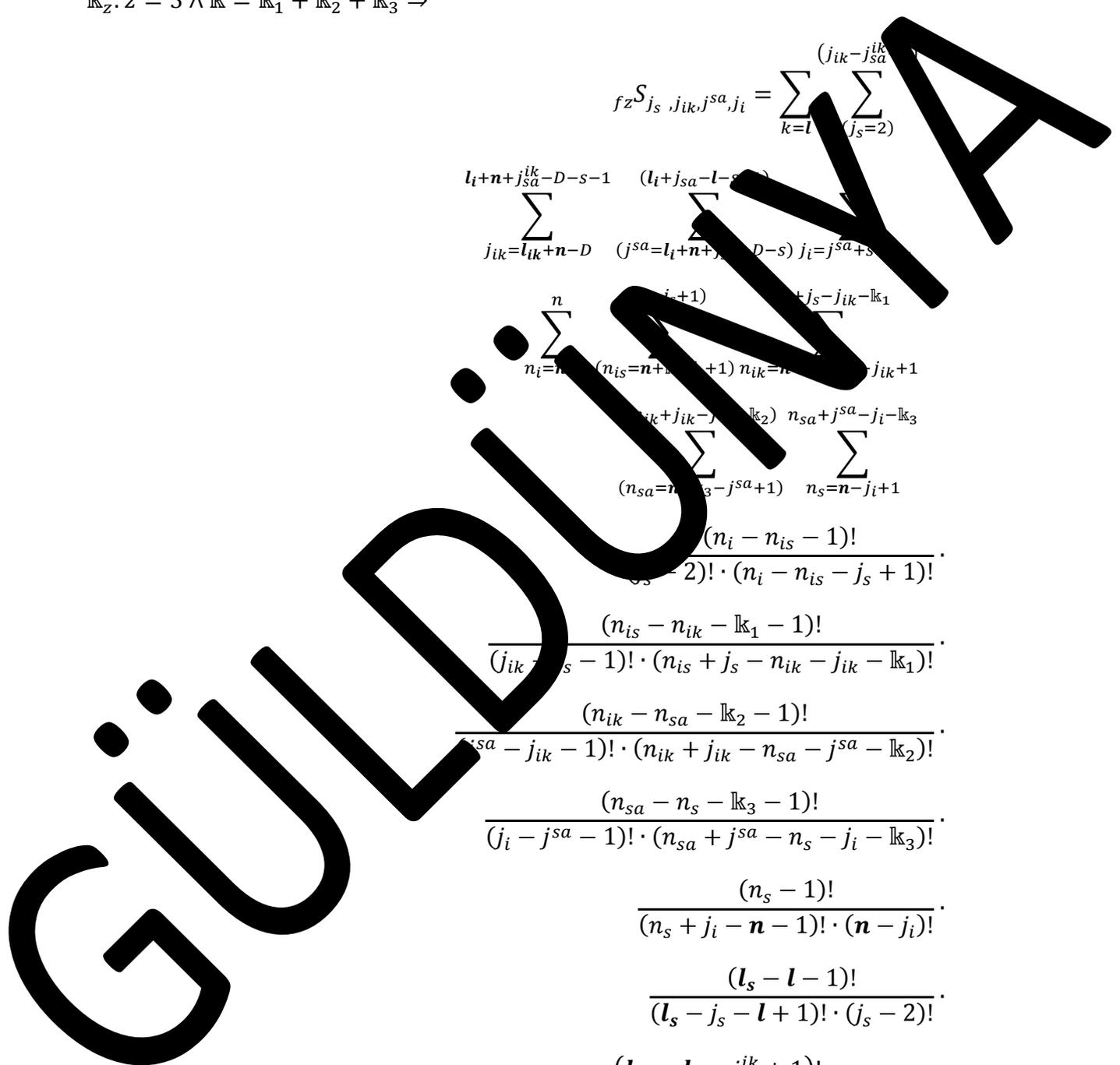
$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i - \mathbb{k}_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$



$$\begin{aligned}
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)}^{(j_{ik} - j_{sa}^{ik} + 1)} \\
 & \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-l} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_i+j_{sa}-l-s+1)} \sum_{j_{sa}^{sa}+s-j_{sa}} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3+1}^{n_{is}+j_s-k_1} \\
 & \frac{(n_{ik}+j_{ik}-j_{sa}^{ik}-1)! \cdot (n_{sa}+j_{sa}-j_i-k_3)!}{(j_s-2)! \cdot (n_{is}-j_s+1)!} \\
 & \frac{(n_{is}-n_{ik}-k_1-1)!}{(j_{ik}-j_{sa}^{ik}-1)! \cdot (n_{ik}+j_s-n_{ik}-j_{ik}-k_1)!} \\
 & \frac{(n_{ik}-n_{sa}-k_2-1)!}{(j_{sa}-j_{sa}^{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j_{sa}^{ik}-k_2)!} \\
 & \frac{(n_{sa}-n_s-k_3-1)!}{(j_{sa}-1)! \cdot (n_{sa}+j_{sa}-n_s-j_i-k_3)!} \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \\
 & \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \\
 & \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \\
 & \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j_{sa}^{ik}-l_{ik})! \cdot (j_{sa}^{ik}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +
 \end{aligned}$$

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$$\begin{aligned}
 & \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)} \\
 & \sum_{j_{ik}=l_s+j_{sa}^{ik}-l+1}^{l_{ik}-l+1} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_i+j_{sa}-l-s+1)} \sum_{j_i=j_{sa}+s-j_{sa}^{ik}} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \\
 & \sum_{(n_{sa}=n+k_3-j_{sa}^{ik}+1)}^{(n_{ik}+j_{ik}-j_{sa}^{ik})} \sum_{(n_s=n-j_i)}^{n_{sa}+j_{sa}-j_i-k_3} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_s - 2)! \cdot (n_{is} + j_s + 1)!} \\
 & \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!} \\
 & \frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i - k_3)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \\
 & \sum_{k=l}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}
 \end{aligned}$$

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$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-l} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j_{sa}+s-j_{sa}} \sum_{n_i=n+lk}^n \sum_{(n_{is}=n+lk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-lk_2)}^{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-lk_2)} \sum_{n_s=n_{sa}+j_{sa}-j_i-lk_3} \frac{(n_i+2 \cdot j_s+j_{sa}-j_{sa}-j_i-lk_1-lk_2-lk_3-2 \cdot j_{sa}^s)!}{(n_i-n-lk_1-lk_2-lk_3)!} \cdot \frac{(n+2 \cdot j_s+j_{sa}-j_{sa}-j_i-2 \cdot j_{sa}^s)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \cdot \frac{(l_s-l)!}{(l_i-l_i)!} \cdot \frac{(D-j_i-n-l_i)! \cdot (n-j_i)!}{(D-j_i-n-l_i)! \cdot (n-j_i)!}$$

$$\begin{aligned}
 &D \geq n < n \wedge l \neq j_i \wedge l_s \leq n+1 \\
 &1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{ik}-1 \leq j_{ik} \leq j_{sa}+j_{sa}^{ik}-j_{sa} \wedge \\
 &j_{ik}+j_{sa}-j_{sa}^{ik} \leq j_{sa} \leq j_i+j_{sa}-j_{sa}^{ik} \wedge j_{sa}+j_{sa} \leq j_i \leq n \wedge \\
 &l_i-j_{sa}^{ik}+j_{sa} \geq l_s \wedge l_s+j_{sa}^{ik}-j_{sa} > l_i \wedge l_i+j_{sa}-s = l_{sa} \wedge \\
 &D+s-n < l_i \leq D+l_s+n-1 \wedge \\
 &D \geq l_i < n \wedge l = lk > 1 \wedge \\
 &j_{sa} < j_{sa}^{ik} \wedge j_{sa}^{ik} < j_{sa}^{ik}-1 \wedge j_{sa}^s < j_{sa}^{ik}-1 \wedge \\
 &s: \{lk_1, j_{sa}^{ik}, \dots, lk_2, j_{sa}, \dots, lk_3, j_{sa}^i\} \wedge \\
 &s \geq 7 \wedge s = lk \wedge \\
 &lk_2 \wedge lk = lk_1 + lk_2 + lk_3 \Rightarrow
 \end{aligned}$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=l}^{(l_i+n-D-s)} \sum_{(j_s=2)}$$

$$\begin{aligned}
 & \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-l+1} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)}^{(l_i+j_{sa}-l-s+1)} \sum_{j_i=j^{sa}+s-j_{sa}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k+l_{k_2}+l_{k_3}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \frac{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})}{(n_{sa}=n+l_{k_3}-j^{sa}+1)} \frac{n_{sa}+j^{sa}-j_i}{n_s-j_i+1} \\
 & \frac{(n_i-1)}{(j_s-2) \cdot (n_i-n_{is}+1)!} \cdot \\
 & \frac{(n_{is}-n_{ik}-l_{k_1}-1)!}{(j_{ik}-j_s-1) \cdot (n_{is}-n_{ik}-l_{k_1}-j_{ik}-l_{k_1})!} \cdot \\
 & \frac{(n_{ik}-n_{sa}-l_{k_2}-1)!}{(j^{sa}-j_{ik}-1) \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-l_{k_2})!} \cdot \\
 & \frac{(n_{sa}-n_s-l_{k_3}-1)!}{(j_i+j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-l_{k_3})!} \cdot \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \\
 & \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \cdot \\
 & \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \cdot \\
 & \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \\
 & \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_i+n-D-s+1)}
 \end{aligned}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{l_{ik}-l+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_i+j_{sa}-l-s+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

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$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k+l_{k_2}+l_{k_3}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n+l_{k_3}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-l_{k_3}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - l_{k_1})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{sa} + j^{sa} - n_s - l_{k_3})!} \cdot \\
 & \frac{(n - n_s - 1)!}{(n_{sa} + j_i - n_s - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s - j_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_i+n-D-s+1)} \\
 & \sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j^{sa}+s-j_{sa}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}}
 \end{aligned}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3} (n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - k_1 - k_2 - k_3 - 2 \cdot j_{sa}^s)! / (n_i - n - k_1 - k_2 - k_3)! \cdot \frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - 1)!}{(D + j_{sa} - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} - j_i + j_{sa} - s = l_{sa} \wedge$

$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - 1 \wedge$

$D \geq n < n \wedge l = k > 0 \wedge$

$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa} < j_{sa}^{ik} - 1$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^s\} \wedge$

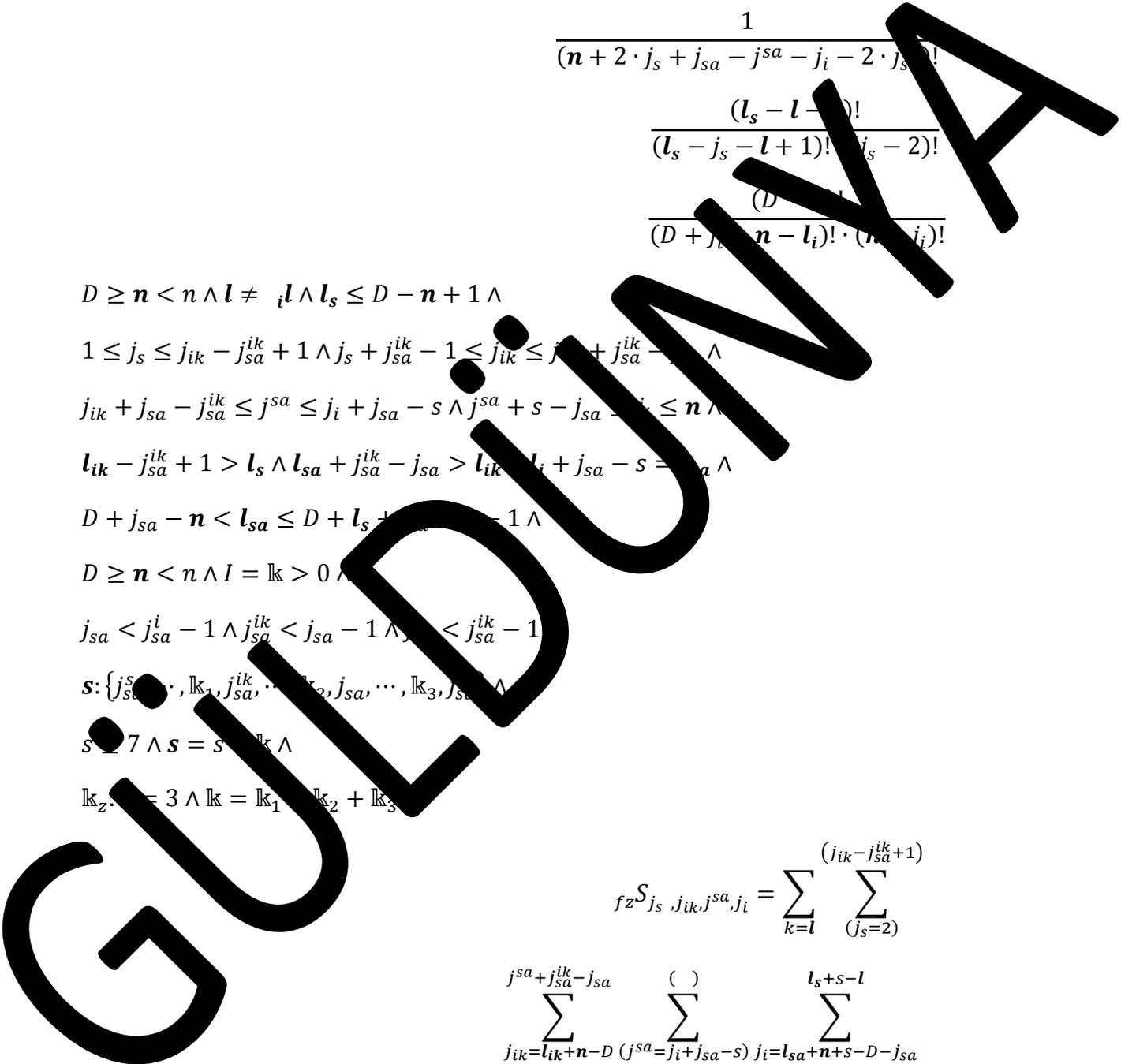
$s \geq 7 \wedge s = s + k \wedge$

$k_z = 3 \wedge k = k_1 + k_2 + k_3$

$$fz^S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{()}^{()} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_s+s-l}$$

$$\sum_{n_i=n+k}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1}$$



$$\begin{aligned}
 & \sum_{(n_{sa}=n+k_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-k_3} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{ik} - k_2)!} \cdot \\
 & \frac{(n_{sa} - n_{sa} - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!} \cdot \\
 & \frac{(n_s - 1)!}{(n - j_i - 1)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - j_{ik} - j_{sa}^{ik} + 1)!}{(j_s + j_{ik} - j_{ik} - l_{ik} - 1)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)} \\
 & \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-l+1} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{()} \sum_{j_i=l_s+s-l+1}^{l_{sa}+s-l-j_{sa}+1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \\
 & \sum_{(n_{sa}=n+k_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-k_3}
 \end{aligned}$$

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$$\begin{aligned}
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2 - 1)!} \cdot \\
& \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
& \frac{(n_s + j_i - n - 1)!}{(n_s + j_i - n - 1)!} \cdot \\
& \frac{(j_s - l - 1)!}{(j_s - l - 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} + j_{sa} - j_{sa}^{ik} - 1)!}{(j_s + l_{ik} - j_{sa}^{ik} - l_s) \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(l_{sa} + j_s - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{k=l} \sum_{\binom{()}{j_s=j_{ik}-j_{sa}^{ik}+1}} \\
& \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{\binom{()}{j^{sa}=j_i+j_{sa}-s}} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_s+s-l} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{\binom{()}{n_{is}=n+\mathbb{k}-j_s+1}}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \sum_{\binom{()}{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}}^{(n_s)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \\
& \frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!} \cdot \\
& \frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!} \cdot
\end{aligned}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_s+j_{sa}-l)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n+k_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-k_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!}$$

$$\begin{aligned}
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i - 1)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j^{sa} - 1)!}{(j_s + l_{ik} - j_{ik} - l_s - j^{sa} - 1)! \cdot (j_{ik} - j_s - j^{sa} + 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - 1)!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik} - 1)! \cdot (j_{sa} + j_{sa} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i - 1)!}{(D + j_i - l_i - 1)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{(l_s - l + 1)} \sum_{(j_s=2)} \\
 & \sum_j^{l_{ik} - l + 1} \sum_{(j^{sa} = l_s + j_{sa} - l + 1)}^{(l_{sa} - l + 1)} \sum_{j_i = j^{sa} + s - j_{sa}} \\
 & \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \\
 & \sum_{(n_{sa} = n + \mathbb{k}_3 - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = n - j_i + 1}^{n_{sa} + j^{sa} - j_i - \mathbb{k}_3} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot
 \end{aligned}$$

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$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_s - j_{sa})!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{k=0}^{(j_s - j_{sa}^{ik} - 1)} \sum_{l=0}^{(l_s - l - 1)} \sum_{j_i = j^{sa} + s - j_{sa}}^{(j_s + j_{sa}^{ik} - j_{sa})} \sum_{n_i = n + k}^{(n_i - 1)} \sum_{n_{is} = n + k - j_s + 1}^{(n_i - 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - k_1}^{(n_i - 1)} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - k_2)}^{(n_{sa} = n_{sa} + j^{sa} - j_i - k_3)} \frac{(j_i + j_s + j_{sa} - j^{sa} - j_i - k_1 - k_2 - k_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - k_1 - k_2 - k_3)!} \cdot \frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$fz^S j_s, j_{ik}, j_{sa}^{ik} = \sum_{l=1}^{k+1} \sum_{(j_s=2)}$$

$$l_{sa} + j_{sa}^{ik} - D - j_{sa} \quad (l_{sa} + j_{sa}^{ik} - D - j_{sa})$$

$$j_{ik} = l_{ik} + n \quad (j_{sa} = n - D) \quad j_i = j_{sa} + s - j_{sa}$$

$$\sum_{n_i=n}^n \sum_{(n_{is}=n+k_1+1)}^{(n_i-1)} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{n_s+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{ik}+j_{ik}-j_{sa}-k_2)}^{(n_{sa}+j_{sa}-j_i-k_3)} \sum_{(n_{sa}=n+k_3-j_{sa}+1)} \sum_{n_s=n-j_i+1}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!}$$

$$\frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i - k_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l}^{k-j_{sa}^{ik}+1} \sum_{s=2}^{s=2}$$

$$\sum_{j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_s}^{l_s+j_{sa}^{ik}-l} \sum_{j_{sa}=j_{sa}-j_{sa}^{ik}+1}^{(l_{sa}-1)} \sum_{j_s=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+l_k}^{(n_i-1)} \sum_{n_{is}=n+l_k-j_s+1}^{(n_i-1)} \sum_{n_{ik}=n+l_k-j_{ik}+1}^{(n_i-1)}$$

$$\sum_{n_{ik}+j_{sa}-j^{sa}-l_{k_2}}^{(n_{ik}+j_{sa}-j^{sa}-l_{k_2})} \sum_{n_{sa}=j^{sa}-j_i-l_{k_3}}^{n_{sa}+j^{sa}-j_i-l_{k_3}} \sum_{n_s=n-j_i+1}^{(n_{k_3}-j^{sa}+1)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - l_{k_1})!}$$

$$\frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!}$$

$$\frac{(n_{sa} - n_s - l_{k_3} - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - l_{k_3})!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

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$$\begin{aligned}
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{(l_s - l + 1)} \sum_{(j_s = 2)}^{(l_s - l + 1)} \\
 & \sum_{j_{ik} = l_s + j_{sa}^{ik} - l + 1}^{l_{ik} - l + 1} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa})}^{(l_{sa} - l + 1)} \sum_{(j_{is} = j_{ik} - j_{sa})}^{(l_{is} - l + 1)} \\
 & \sum_{n_i = n + k}^n \sum_{(n_{is} = n - k)}^{(n_i - j_s + 1)} \sum_{(n_{ik} = n + k_3 - j_{ik} + 1)}^{(n_{is} + j_s - j_{ik} - k_1)} \\
 & \sum_{(n_{ik} + j_{sa} - k_2)}^{(n_{ik} + j_{sa} - k_2)} \sum_{(n_{sa} = j_i - k_3)}^{(n_{sa} = j_i - k_3)} \\
 & \sum_{(n_s = n + k_3 - j^{sa})}^{(n_s = n + k_3 - j^{sa})} \sum_{n_s = n - j_i + 1}^{(n_s = n - j_i + 1)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -
 \end{aligned}$$

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$$\sum_{k=l}^{\binom{)}{}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\binom{)}{}}$$

$$\sum_{j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa}}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{\binom{)}{}} \sum_{j_i=j^{sa}+s-}^{\binom{)}{}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{ik}-k_1}^{\binom{)}{}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{\binom{)}{}} \sum_{(n_{sa}+j^{sa}-j_i)}^{\binom{)}{}}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - k_2 - \dots - 2 \cdot j_{sa}^s)!}{(n_i - k_1 - k_2 - \dots - k_3)!}$$

$$\frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l \neq 1 \wedge l_s \leq D - n - 1 \wedge$$

$$1 < j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_{sa}^{ik} + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_i \leq j_i + j_{sa} \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa}^{ik} - j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n - l_{sa} \leq D - l_s + j_{sa} - n - 1 \wedge$$

$$D < n \wedge I = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$\begin{aligned}
 f_z S_{j_s, j_{ik}, j^{sa}, j_i} &= \sum_{k=l}^{(l_{sa}+n-D-j_{sa})} \sum_{(j_s=2)} \\
 &\sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-l+1} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+s-j} \\
 &\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2-k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \\
 &\frac{(n_{ik}+j_{ik}-j^{sa})! \cdot (n_{sa}+j_s-j_i-k_3)}{(n_{sa}=n+k_3-k_1+1)! \cdot (n_s=n-j_i)} \cdot \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_{is}-j_s+1)!} \\
 &\frac{(n_{is}-n_{ik}-k_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-k_1)!} \\
 &\frac{(n_{ik}-n_{sa}-k_2-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}-j_{ik}-n_{sa}-j^{sa}-k_2)!} \\
 &\frac{(n_{sa}-n_s-k_3-1)!}{(j_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-k_3)!} \\
 &\frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \\
 &\frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \\
 &\frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \\
 &\frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \\
 &\frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \\
 &\sum_{k=l}^{(l_s-l-1)} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}
 \end{aligned}$$

GÜLTIG

$$\begin{aligned}
 & \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{l_{ik}-l+1} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_{sa}-l+1)} \sum_{j_i=j_{sa}+s-j_{sa}} \\
 & \sum_{n_i=n+l}^n \sum_{(n_{is}=n+l-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_2+l_3-j_i}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n+l_3-j_{sa}+1)}^{(n_{ik}+j_{ik}-j_{sa}-l_{k_2})} \sum_{n_s=j_i+1}^{n_{sa}+j_{sa}-j_i} \\
 & \frac{(n_i-1)!}{(j_s-2)!(n_i-n_{is}+1)!} \cdot \\
 & \frac{(n_i-n_{ik}-l_{k_1}-1)!}{(j_{ik}-j_s-1)!(n_i-n_{is}-j_{ik}-l_{k_1})!} \cdot \\
 & \frac{(n_{ik}-n_{is}-l_{k_2}-1)!}{(j_{sa}-j_{ik}-1)!(n_{ik}+j_{sa}-n_{sa}-j_{sa}-l_{k_2})!} \cdot \\
 & \frac{(n_{sa}-n_s-l_{k_3}-1)!}{(j_i-j_{sa}-1)!(n_{ik}+j_{sa}-n_s-j_i-l_{k_3})!} \cdot \\
 & \frac{(n_s-1)!}{(l_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \\
 & \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \cdot \\
 & \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \cdot \\
 & \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j_{sa}-l_{ik})! \cdot (j_{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} \cdot \\
 & \sum_{k=l}^{(l_s-l-1)} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)} \\
 & \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\quad)} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\quad)} \sum_{j_i=j_{sa}+s-j_{sa}}
 \end{aligned}$$

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$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3} (n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - k_1 - k_2 - k_3 - 2 \cdot j_s)! \cdot (n_i - n - k_1 - k_2 - k_3)! \cdot \frac{1}{(n + 2 \cdot j_s + j_{sa} - j_i - j_s \cdot j^{sa})!} \cdot \frac{(l_i - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!} \cdot \frac{(D - l)!}{(D - j_i - n - l + 1)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$

$D + l_s + s - n - l_i + 1 \leq l \leq i \wedge l - 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} + j_{sa}^{ik} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + j_{sa} - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_{sa} + j_{sa} - s = l_{sa} \wedge$

$D + s - n < l_i \leq D - l_s + s - n - 1$

$D \geq n < n \wedge l_i - k > 0$

$j_{sa} < j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa} < j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \dots, k_1, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 7 \wedge s = s + 1$

$k_z: z = 3 \wedge k_z = k_1 + k_2 + k_3 \Rightarrow$

$$f^z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-l+1} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{()} \sum_{j_i=l_i+n-D}^{l_i-l+1}$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{i_k}=n+l_k+l_{k_3}-j_{i_k}+1}^{n_{i_s}+j_s-j_{i_k}-l_{k_1}} \\
 & \sum_{(n_{s_a}=n+l_{k_3}-j^{s_a}+1)}^{(n_{i_k}+j_{i_k}-j^{s_a}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{s_a}+j^{s_a}-j_i-l_{k_3}} \\
 & \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \\
 & \frac{(n_{i_s} - n_{i_k} - l_{k_1} - 1)!}{(j_{i_k} - j_s - 1)! \cdot (n_{i_s} + j_s - j_{i_k} - l_{k_1})!} \cdot \\
 & \frac{(n_{i_k} - n_{s_a} - 1)!}{(j^{s_a} - j_{i_k} - 1)! \cdot (n_{i_k} + j_{i_k} - n_{s_a} - j^{s_a} - l_{k_2})!} \cdot \\
 & \frac{(n_{s_a} - n_s - 1)!}{(j_i - j^{s_a} - 1)! \cdot (n_{i_s} + j^{s_a} - n_s - l_{k_3})!} \cdot \\
 & \frac{(n_s - 1)!}{(n_{i_s} + j_i - n_s - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{i_k} - l_s - j_{s_a}^{i_k} + 1)!}{(j_s - j_{i_k} - j_{i_k} - l_s)! \cdot (j_{i_k} - j_s - j_{s_a}^{i_k} + 1)!} \cdot \\
 & \frac{(l_{s_a} + j_{s_a}^{i_k} - l_{i_k} - j_{s_a})!}{(j_{i_k} + l_{s_a} - j^{s_a} - l_{i_k})! \cdot (j^{s_a} + j_{s_a}^{i_k} - j_{i_k} - j_{s_a})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=l}^{()} \sum_{(j_s=j_{i_k}-j_{s_a}^{i_k}+1)}^{()} \\
 & \sum_{j_{i_k}=j^{s_a}+j_{s_a}^{i_k}-j_{s_a}}^{()} \sum_{(j^{s_a}=j_i+j_{s_a}-s)}^{()} \sum_{j_i=l_i+n-D}^{l_s+s-l} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{i_k}=n_{i_s}+j_s-j_{i_k}-l_{k_1}}
 \end{aligned}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3} (n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^s)! / (n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!$$

$$\frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - 1)!}{(D + j_s - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$

$D + l_s + s - n - l_i + 1 \leq l \leq i - 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} - s - j_{sa} \leq j_i \leq i \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} \leq l_i + j_{sa} - s = l_{sa} \wedge$

$D + s - n < l_i \leq D + l_s - n - 1 \wedge$

$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

$j_{sa} < i - 1 \wedge j_{sa}^{ik} < i - 1 \wedge j_{sa}^s < i - 1 \wedge$

$s \in \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, i\} \wedge$

$s \geq 1 \wedge s = s + \mathbb{k} \wedge$

$z: z = s + \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$fz^{S_{j_s, j_{ik}, j^{sa}, j_i}} = \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-l+1} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-k_2) \\ (n_{sa}=n+k_3-j^{sa}+1)}} \sum_{\substack{n_{sa}+j^{sa}-j_i-k_3 \\ n_s=n-j_i+1}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{ik} - k_2)!} \cdot \frac{(n_{sa} - n_{is} - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!} \cdot \frac{(n_s - 1)!}{(n - j_i - 1)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - j_{ik} - j_{sa}^{ik} + 1)!}{(j_s + j_{ik} - j_{ik} - l_{ik} - 1)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} + j_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \sum_{k=1}^{(l_s-l+1)} \sum_{(j_s=l_i+n-D-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{\binom{()}{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3}$$

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$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}$$

$$\frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!}$$

$$\frac{(D - l)!}{(D + j_i - n - l_i)! (n - j_i)!}$$

$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$

$D + l_s + s - n - l_i + 1 \leq l \leq i \wedge l - 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i - n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}$

$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$

$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} \wedge j_{sa}^s < j_{sa}^{ik} \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 7 \wedge s = s + \mathbb{k}$

$\mathbb{k}_2 = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$fz^S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-l+1} \sum_{(j^{sa}=j_i+j_{sa}-s)} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{sa}+s-l-j_{sa}+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
 & \frac{(n_s + j_i - n - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(n_s - l - 1)!}{(n_s - l - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} + j_{sa} - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{sa} - l_s) \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_{sa} + j_s - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=l}^{(\quad)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)} \\
 & \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\quad)} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\quad)} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_s+s-l} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \\
 & \frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!} \cdot \\
 & \frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!} \cdot
 \end{aligned}$$

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$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$(D \geq n < n \wedge l \neq i \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$l_i \leq D + s - n)) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k}_1$$

$$\mathbb{k}_2 \cdot z = 3 \wedge \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(j_i+j_{sa}-s)} \sum_{j_i=s+1}^{l_s+s-l}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
 & \frac{(n_s + l_i - n - 1)!}{(j_s - l_i - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - j_{sa}^{ik} - 1)!}{(j_s + l_{ik} - j_{sa}^{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(l_{sa} - l_i - l_{sa} - s)!}{(j_s + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{(l_s - l + 1)} \sum_{(j_s = 2)} \\
 & \sum_{j_{ik} = j_{sa}^{ik} + 1}^{l_{ik} - l + 1} \sum_{(j^{sa} = j_{sa} + 1)}^{(l_{sa} - l + 1)} \sum_{j_i = l_s + s - l + 1}^{l_i - l + 1} \\
 & \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \\
 & \sum_{(n_{sa} = n + \mathbb{k}_3 - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = n - j_i + 1}^{n_{sa} + j^{sa} - j_i - \mathbb{k}_3} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}
 \end{aligned}$$

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$$\begin{aligned}
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l - 1)!}{(l_s - j_i - l + 1)! \cdot (l - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa} + 1)!}{(j_s + l_{ik} - j_{sa} - 1)! \cdot (j_{ik} - j_{sa} - j^{ik} + 1)!} \cdot \\
 & \frac{(n_{sa} + j_{sa} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j_s + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} - l_i - j_i - l_s)! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=l}^{(\quad)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)} \\
 & \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\quad)} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\quad)} \sum_{j_i=s+1}^{l_s+s-l} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \\
 & \frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!} \cdot \\
 & \frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!} \cdot
 \end{aligned}$$

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$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$(D \geq n < n \wedge l \neq i \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$l_i \leq D + s - n)) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k}_1$$

$$\mathbb{k}_2 \cdot z = 3 \wedge \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(l_s+j_{sa}-l)} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2 - 1)!} \cdot \\
 & \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3 - 1)!} \cdot \\
 & \frac{(n_s + j_i - n - 1)!}{(n_s - j_i - 1)!} \cdot \\
 & \frac{(n_s - l - 1)!}{(j_s - l - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} + j_{ik} - j_{sa}^{ik} - 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(l_{sa} + j_{sa} - l_{sa} - s)!}{(j_s + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{(l_s - l + 1)} \sum_{(j_s = 2)} \\
 & \sum_{j_{ik} = j_{sa}^{ik} + 1}^{l_{ik} - l + 1} \sum_{(j^{sa} = l_s + j_{sa} - l + 1)}^{(l_{sa} - l + 1)} \sum_{j_i = j^{sa} + s - j_{sa}}^{l_i - l + 1} \\
 & \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \\
 & \sum_{(n_{sa} = n + \mathbb{k}_3 - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = n - j_i + 1}^{n_{sa} + j^{sa} - j_i - \mathbb{k}_3} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
 \end{aligned}$$

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$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l - 1)!}{(l_s - j_i - l + 1)! \cdot (l - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{sa}^{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} + 1)!}$$

$$\frac{(n_{sa} + j_{sa}^{lk} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa}^{lk} - l_{ik})! \cdot (j_{sa}^{lk} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} - l_i - j_i - l_s)! \cdot (j_i + j_{sa} - j^{sa} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l}^{(\)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{lk}-j_{sa}}^{(l_s+j_{sa}-l)} \sum_{(j^{sa}=j_{sa}+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}$$

$$\frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!}$$

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$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$(D \geq n < n \wedge l \neq i \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$l_i \leq D + s - n)) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k}_1 \wedge$$

$$\mathbb{k}_2 \cdot z = 3 \wedge \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s + j_{sa}^{ik} - l} \sum_{(j^{sa}=j_{ik} + j_{sa} - j_{sa}^{ik})}^{(l_{sa} - l + 1)} \sum_{j_i=j^{sa} + s - j_{sa}}^{l_i - l + 1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2 - 1)!} \cdot \\
 & \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3 - 1)!} \cdot \\
 & \frac{(n_s + j_i - n - 1)!}{(j_s - l - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - j_{sa}^{ik} - 1)!}{(j_s + l_{ik} - j_{sa}^{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_{sa} + j_s - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(l_{sa} - l_s - s)!}{(j_s + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{(l_s - l + 1)} \sum_{(j_s = 2)} \\
 & \sum_{j_{ik} = l_s + j_{sa}^{ik} - l + 1}^{l_{ik} - l + 1} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}^{(l_{sa} - l + 1)} \sum_{j_i = j^{sa} + s - j_{sa}}^{l_i - l + 1} \\
 & \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \\
 & \sum_{(n_{sa} = n + \mathbb{k}_3 - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = n - j_i + 1}^{n_{sa} + j^{sa} - j_i - \mathbb{k}_3} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}
 \end{aligned}$$

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$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l - 1)!}{(l_s - j_i - l + 1)! \cdot (l - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{sa}^{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} + 1)!}$$

$$\frac{(n_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa}^{ik} - l_{ik})! \cdot (j_s + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j_s - l_i - j_i - l_s)! \cdot (j_i + j_{sa} - j^{sa} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l}^{(\)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}$$

$$\frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!}$$

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$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$(D \geq n < n \wedge l \neq i \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$l_i \leq D + s - n)) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k}_1 \wedge$$

$$\mathbb{k}_2 \cdot z = 3 \wedge \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_s - l + 1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{l_{ik}-l+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \frac{(n_s + n - 1 - j_i)!}{(n_s - 1)! \cdot (n - 1 - j_i)!} \cdot \frac{(n - l - 1)!}{(n - l)!} \cdot \frac{(j_s - l - 1)! \cdot (j_s - 2)!}{(j_s - l)!} \cdot \frac{(l_{ik} + j_{ik} - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(l_{sa} + j_{sa} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(l_{sa} + j_{sa} - l_{sa} - s)!}{(j_i + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l}^{(l_s - l + 1)} \sum_{(j_s = 2)}$$

$$\sum_{j_{ik} = j_s + j_{sa}^{ik} - 1} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})} \sum_{j_i = j^{sa} + s - j_{sa}}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{()} \sum_{n_s = n_{sa} + j^{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}$$

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$$\frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - l_i - 1)!}$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n - l_i$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n - 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n - l_i \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1)) \wedge$$

$$D \geq n < n \wedge l_i = 0 > 0 \wedge$$

$$j_s < j_{sa}^{ik} - j_{sa}^{ik} < j_{sa}^{ik} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^{ik}, \dots, \mathbb{k}_3, j_{sa}^s\} \wedge$$

$$s \geq 7, j_{sa}^s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k}_z = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fz_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=l_{sa}+n-D)}^{(j_i+j_{sa}-s)} \sum_{j_i=l_i+n-D}^{l_s+s-l}$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{i_k}=n+l_{k_2}+l_{k_3}-j_{i_k}+1}^{n_{i_s}+j_s-j_{i_k}-l_{k_1}} \\
 & \sum_{(n_{s_a}=n+l_{k_3}-j^{s_a}+1)}^{(n_{i_k}+j_{i_k}-j^{s_a}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{s_a}+j^{s_a}-j_i-l_{k_3}} \\
 & \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \\
 & \frac{(n_{i_s} - n_{i_k} - l_{k_1} - 1)!}{(j_{i_k} - j_s - 1)! \cdot (n_{i_s} + j_s - j_{i_k} - l_{k_1})!} \cdot \\
 & \frac{(n_{i_k} - n_{s_a} - 1)!}{(j^{s_a} - j_{i_k} - 1)! \cdot (n_{i_k} + j_{i_k} - n_{s_a} - j^{s_a} - l_{k_2})!} \cdot \\
 & \frac{(n_{s_a} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{i_s} + j^{s_a} - n_s - l_{k_3})!} \cdot \\
 & \frac{(n_s - 1)!}{(n_i + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_i - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{i_k} - l_s - j_{s_a}^{i_k} + 1)!}{(j_s + l_{i_k} - j_{i_k} - l_s)! \cdot (j_{i_k} - j_s - j_{s_a}^{i_k} + 1)!} \cdot \\
 & \frac{(l_{s_a} + j_{s_a}^{i_k} - l_{i_k} - j_{s_a})!}{(j_{i_k} + l_{s_a} - j^{s_a} - l_{i_k})! \cdot (j^{s_a} + j_{s_a}^{i_k} - j_{i_k} - j_{s_a})!} \cdot \\
 & \frac{(l_i + j_{s_a} - l_{s_a} - s)!}{(j^{s_a} + l_i - j_i - l_{s_a})! \cdot (j_i + j_{s_a} - j^{s_a} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +
 \end{aligned}$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{i_k}=l_{i_k}+n-D}^{l_{i_k}-l+1} \sum_{(j^{s_a}=l_{s_a}+n-D)}^{(l_{s_a}-l+1)} \sum_{j_i=l_s+s-l+1}^{l_i-l+1}$$

GÜLDEN

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_s+1) \\ (n_{i_s}=n+l_k-j_s+1)}} \sum_{\substack{n_{i_s}+j_s-j_{ik}-l_{k_1} \\ n_{ik}=n+l_{k_2}+l_{k_3}-j_{ik}+1}} \\
 & \sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-l_{k_2}) \\ (n_{sa}=n+l_{k_3}-j^{sa}+1)}} \sum_{\substack{n_{sa}+j^{sa}-j_i-l_{k_3} \\ n_s=n-j_i+1}} \\
 & \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \\
 & \frac{(n_{i_s} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{i_s} + j_s - j_{ik} - l_{k_1})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{sa} + j^{sa} - n_s - l_{k_3})!} \cdot \\
 & \frac{(n - n_s - 1)!}{(n_{sa} + j_i - n_s - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + j_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot
 \end{aligned}$$

$$\sum_{k=l}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{()} \sum_{j_i=l_i+n-D}^{l_s+s-l}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}$$

$$\frac{1}{(n + 2 \cdot j_s + j_{sa} - j_i - j^{sa} \cdot j_{sa})!}$$

$$\frac{(l_i - l - 1)!}{(l_s - j_s - \dots + 1)! \cdot (j_s - \dots)!}$$

$$\frac{(D - \dots)!}{(D - j_i - n - \dots - n - j_i)!}$$

$$\left((D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge \right.$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa} > l_{ik} \wedge l_{sa} + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{ik} < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$\begin{aligned}
 f_{z^S} S_{j_s, j_{ik}, j^{sa}, j_i} &= \sum_{k=l}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)} \\
 &\sum_{j_{ik}=l_{ik}+n-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_i+n+j_{sa}-D-s-1)} \sum_{j_i=l_i+n}^{l_i-l+1} \\
 &\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2}^{n_{is}+j_s-j_{ik}-k_1} \sum_{j_i=n}^{n_{ik}+j_s-j_{ik}-k_1} \\
 &\sum_{(n_{sa}=n+k_3-1)}^{(n_{sa}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i}^{n_{ik}+j_s-j_{ik}-k_1} \\
 &\frac{(n_i - n_{ik} - 1)!}{(j_s - 2)! \cdot (n_{is} - j_s + 1)!} \\
 &\frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \\
 &\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \\
 &\frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!} \\
 &\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 &\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \\
 &\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \\
 &\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \\
 &\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \\
 &\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +
 \end{aligned}$$

GÜLDÜZMAYA

$$\begin{aligned}
 & \sum_{k=l}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)} \\
 & \sum_{j_{ik}=l_{ik}+n-D}^{j_{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(l_s+j_{sa}-l)}^{(l_s+j_{sa}-l)} \sum_{j_i=j_{sa}+s-}^{l_i-l+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k-}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \frac{(n_{ik}+j_{ik}-j_{sa})! \cdot (n_{sa}+j_{sa}-j_i-l_{k_3})!}{(n_{sa}=n+l_{k_3}-j_{sa}+1)! \cdot (n_s=n-j_i+)} \\
 & \frac{(n_i-n_{ik}-1)!}{(j_s-2)! \cdot (n_{is}-n_{ik}-j_s+1)!} \\
 & \frac{(n_{is}-n_{ik}-l_{k_1}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-l_{k_1})!} \\
 & \frac{(n_{ik}-n_{sa}-l_{k_2}-1)!}{(j_{sa}-j_{ik}-1)! \cdot (n_{ik}-j_{ik}-n_{sa}-j_{sa}-l_{k_2})!} \\
 & \frac{(n_{sa}-n_s-l_{k_3}-1)!}{(j_i-j_{sa}-1)! \cdot (n_{sa}+j_{sa}-n_s-j_i-l_{k_3})!} \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \\
 & \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \\
 & \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \\
 & \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j_{sa}-l_{ik})! \cdot (j_{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \\
 & \frac{(l_i+j_{sa}-l_{sa}-s)!}{(j_{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j_{sa}-s)!} \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} +
 \end{aligned}$$

GÜLDENWA

$$\begin{aligned}
 & \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}^{(l_s-l+1)} \\
 & \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-l+1} \sum_{(j^{sa}=l_s+j_{sa}-l+1)}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+s-j}^{l_i-l+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n+l_{k_3}-j_{ik}+1)}^{(n_{ik}+j_{ik}-j^{sa})} \sum_{n_s=n-j_i}^{n_{sa}+j_{ik}-j_i-l_{k_3}} \\
 & \frac{(n_i - n - 1)!}{(j_s - 2)! \cdot (n_{is} - j_s + 1)!} \\
 & \frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - l_{k_1})!} \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \\
 & \frac{(n_{sa} - n_s - l_{k_3} - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - l_{k_3})!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

GÜLDÜZ

$$\sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{lk}-j_{sa}}^{(l_s+j_{sa}-l)} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)}^{(l_s+j_{sa}-l)} \sum_{j_i=j^{sa}+s-j_{sa}}^{(\cdot)}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-k_1}^{(\cdot)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{(\cdot)} \sum_{(n_{sa}=n_{sa}+j^{sa}-j_i)}^{(\cdot)}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - k_2 - j_s - 2 \cdot j_{sa}^s)!}{(n_i + n - k_1 - k_2 - j_s - 2 \cdot j_{sa}^s)!} \cdot \frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_i \neq l \wedge l_s \leq D - n + 1 \wedge 1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge l_i - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} > j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge D + s - n < l_i \leq D + l_s + s - n - 1) \vee (D \geq n < n \wedge l_i \neq l \wedge l_s \leq D - n + 1 \wedge 1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge l_i - s + 1 > l_s \wedge D + s - n < l_i \leq D + l_s + s - n - 1) \wedge D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_z^S j_s, j_{ik}, j_{sa}, j_i = \sum_{k=l}^{(j_{ik}-j_{sa}^{ik})} \sum_{j_s=2}^{(j_{ik}-j_{sa}^{ik})} \sum_{j_{ik}=l_{ik}+n-D}^{l_i+n+j_{sa}^{ik}-D-s-1} \sum_{j_i=l_i+1}^{(l_s+1)} \sum_{n_i=n}^{(n_{is}=n+1)} \sum_{n_{ik}=n}^{(n_{ik}+1)} \sum_{n_{sa}=n_{sa}-j_{sa}^{ik}}^{(n_{sa}+j_{sa}^{ik}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{(n_{sa}+j_{sa}^{ik}-j_{sa}^{ik}-\mathbb{k}_3)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\begin{aligned}
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)}^{(j_{ik} - j_{sa}^{ik} + 1)} \\
 & \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa})}^{(l_{sa}-l+1)} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)} \\
 & \sum_{n_i=n+k}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{is}+j_s-j_{ik}-k)}^{(n_{is}+j_s-j_{ik}-k)} \\
 & \sum_{(n_{ik}+j_{ik}-j^{sa}-k_2)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{(n_{sa}-j_i-k_3)}^{(n_{sa}-j_i-k_3)} \\
 & \sum_{(n_s=n+k_3-j^{sa}-1)}^{(n_s=n+k_3-j^{sa}-1)} \sum_{n_s=n-j_i+1}^{(n_s=n-j_i+1)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{ik} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}
 \end{aligned}$$

GÜLDENYA

$$\begin{aligned}
& \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=l}^{(l_s - l + 1)} \sum_{j_s=2}^{(l_s - l + 1)} \frac{(l_s - l + 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(n_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
& \frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}
\end{aligned}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l}^{(\)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_{sa}^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_{sa}^{ik})}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s}^{l_{k1}}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - l_{k1} - l_{k2} - l_{k3} - 2 \cdot j_{sa}^s)!}{(n_i - n - l_{k1} - l_{k2} - l_{k3} - j_i - l_{k3})!}$$

$$\frac{1}{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$(D \geq n < n \wedge l_i \neq l_s \wedge l_i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n > l_i \leq D + l_s + s - n - 1) \vee$$

$$(D < n \wedge l_i \neq l_s \wedge l_i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$(D + s - n < l_i \leq D + l_s + s - n - 1) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fz^S j_s, j_{ik}, j_{sa}, j_i = \sum_{k=l}^{(l_s - D - s)} \sum_{j_{ik}=l_{ik}+1}^{(l_{sa}-1)} \sum_{j_i=l_i-l+1}^{(l_i+n-D)} \sum_{n_i=n+\mathbb{k}}^{(n_i-j_s+1)} \sum_{n_{is}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n+\mathbb{k}_3-j_{sa}+1}^{(n_{ik}+j_{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{(n_{sa}+j_{sa}-j_i-\mathbb{k}_3)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\begin{aligned}
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=0}^{(l_i - l + 1)} \binom{l_i - l + 1}{k} (j_s = l_i + n - j_i - s + 1) \\
 & \sum_{j_{ik} = j_s + j_{sa}^{ik}}^{l_{ik} - l + 1} \binom{l_{ik} - l + 1}{j_{ik} - j_s - j_{sa}^{ik}} (j^{sa} = j_{ik} + j_{sa} - j_i) \sum_{j_i = j^{sa} + s - j_{sa}}^{(l_i - l + 1)} \\
 & \sum_{n_i = n + l_k}^n \binom{n}{n_i} \sum_{n_{is} = n + l_k - j_s + j_{sa}^{ik}}^{(n_{ik} + 1)} \sum_{n_{ik} = n + l_{k_2} + l_{k_3} - j_{ik} + 1}^{(n_{ik} + 1)} \sum_{n_{sa} = j^{sa} - j_i - l_{k_3}}^{(n_{ik} - l_{k_1} - j^{sa} - l_{k_2})} \sum_{n_s = n - j_i + 1}^{(n_{sa} = n - l_{k_3} - j^{sa} + 1)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - l_{k_1})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - n_s - l_{k_3} - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - l_{k_3})!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}
 \end{aligned}$$

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$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_i+n-D-s+...)}^{(l_s-l+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{()} \sum_{(j^{sa}=j_{ik}+j_{sa}^{ik}-1)}^{()} \sum_{(j_i=j^{sa}+j_{sa}^{ik}-j_{sa})}^{()}$$

$$\sum_{n_i=n+k}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{(j_s-j_{ik}-k_1)}^{(n_i-j_s+1)}$$

$$\sum_{(n_{sa}=n_{ik}-j^{sa}-k_2)}^{()} \sum_{(n_{sa}+j^{sa}-j_i-k_3)}^{()}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - k_1 - k_2 - k_3 - 2 \cdot j_{sa}^s)!}{(n_i + n - k_1 - k_2 - k_3)!}$$

$$\frac{1}{(n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$D + l + s - n - l_i + 1 \leq l \leq i \wedge l - 1 \wedge$$

$$1 - j_s \leq j_s - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$D + l_s + s - n - l_i + 1 \leq l \leq i \wedge l - 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f^{z=j_{sa}^{ik}, j_{sa}^{ik}, j_{sa}^i, j_i} \sum_{k=1}^{(l_s-l+1)} \sum_{(j_s=2)}^{(l_s-l+1)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-l} \sum_{j_{sa}=l_{sa}+n-D}^{(l_{sa}-l)} \sum_{j_i=l_i+n-D}^{l_i-l+1}$$

$$\sum_{n_{is}=n+\mathbb{k}-j_s+1}^{n} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(l_i + j_{sa} - l_{sa} - s)}{(j_{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - l_{sa} - s)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{k=l_i}^{(l_s - l + 1)} \sum_{j_i = j_{sa} + s - j_{sa}}^{(n_i - l_i - 1)} \sum_{j_s = j_{sa} + j_{sa}^{ik} - 1}^{(j_{sa} + j_{sa}^{ik} + j_{sa} - j_{sa}^{ik})} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - k_1}^{(n_{is} = n + k - j_s + 1)} \sum_{n_s = n_{sa} + j_{sa} - j_i - k_3}^{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - k_2)} \frac{(n_i + j_s + j_{sa} - j_{sa} - j_i - k_1 - k_2 - k_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - k_1 - k_2 - k_3)!} \cdot \frac{1}{(n + 2 \cdot j_s + j_{sa} - j_{sa} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l = i \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$fz^S j_s j_{ik} j_{sa}^{ik} j_{sa}^i j_{sa}^s \sum_{k=1}^{(\cdot)} \sum_{l=1}^{(\cdot)}$$

$$l_i - l + 1 \sum_{i=s}^{(\cdot)}$$

$$n_{ik} + k \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{n} \sum_{n_{sa}=n+k_3-j_{sa}+1}^{(n_i-j_{ik}-k_1+1)} (n_{sa}+j_{sa}^i-j_i-k_3)$$

$$\frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!}$$

$$\frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i - k_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(l_i + j_{sa} - j_i - l_{sa})! \cdot (j_i - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=i}^{()} \sum_{l_s=1}^{()}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{()} \sum_{(j^{sa}=j_{sa})}^{()} \sum_{j_i}^{()}$$

$$\sum_{n_i=n+l}^n \sum_{(n_{ik}=n_i-l_1+1)}^{()}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_2}^{()} \sum_{(n_{sa}+j^{sa}-j_i)}^{()}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - l_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - l_1 - l_2 - l_3)! \cdot (n + 2 \cdot j_s - j_{sa} - j_i - l_3 - 2 \cdot j_{sa}^s)! \cdot (D - l_i)!}$$

$$(D + s - n - l_i)! \cdot (n - s)!$$

$$D \geq n < l = i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_{sa}^{ik} - 1 \leq j_s \leq j_{sa}^{ik} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + j_{sa} \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$l_i \leq D + s - n \wedge$$

$$D \geq n < n \wedge l_i - s > 0 \wedge$$

$$j_{sa} < j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} < j_{sa}^{ik} - 1 \wedge j_{sa} < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \dots, l_3, j_{sa}^i\} \wedge$$

$$s \geq l_3 = s + l_3 \wedge$$

$$l_3: z = 3 \wedge l_3 = l_1 + l_2 + l_3 \Rightarrow$$

$$f_z^S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=i}^{()} \sum_{l_s=1}^{()}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{()} \sum_{(j^{sa}=j_{sa})}^{()} \sum_{j_i=l_i+n-D}^{l_i-i+1}$$

$$\begin{aligned}
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \\
& \sum_{n_{sa}=n+\mathbb{k}_3-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=n-j_i+1)}^{(n_{sa}+j^{sa}-j_i-\mathbb{k}_3)} \\
& \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
& \frac{(n_s - j_i - n - l_i - 1)!}{(n_s - j_i - n - l_i - 1)!} \cdot \\
& \frac{(l_i + j^{sa} - l_{sa} - s)!}{(l_i + j^{sa} - j_i - l_{sa})! \cdot (j_i - s)!} \cdot \\
& \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{k=1}^{()} \sum_{j_s=1}^{()} \\
& \sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_{sa})}^{()} \sum_{j_i=s}^{()} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{()} \\
& \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}^{()} \\
& \frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!} \cdot \\
& \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}
\end{aligned}$$

$$D \geq n < n \wedge l = {}_i l \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$\sum_{k=1}^{\binom{()}{j_s}} \sum_{j_{ik}^{sa} = j_i + j_{sa} - s} \sum_{j_i = s}^{l_i - i + 1} \sum_{n_i = n + \mathbb{k}}^n \sum_{n_{ik} = n + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n + \mathbb{k}_3 - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \sum_{(n_s = n - j_i + 1)}^{(n_{sa} + j_{sa} - j_i - \mathbb{k}_3)} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} - j_{sa})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l}^{()} \sum_{(j_s=1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j_{sa})} \sum_{j_i=s}$$

$$\sum_{n_i=0}^n \sum_{\mathbb{k}} (n_{ik}=n_i - j_{ik} + 1)$$

$$\sum_{()} \sum_{()} \sum_{()}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_{sa} - \mathbb{k}_1 - \mathbb{k}_2 + \mathbb{k}_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l = l \wedge l_i = 0 + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq n + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa} \leq j_{sa}^{ik} \leq j_i + j_{sa} - s \wedge j_{sa}^{ik} - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_{sa}^{ik} \wedge l_{sa}^{ik} - j_{sa}^{ik} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} = 0 \wedge$$

$$j_{sa} < j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} < j_s - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_s^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j_{sa}^{ik}, j_i} = \sum_{k=l}^{()} \sum_{(j_s=1)}$$

$$\begin{aligned}
 & \sum_{j_{ik}=j_{sa}^{ik}} \binom{l_{sa}-i+1}{j_{sa}^{sa}} \sum_{(j^{sa}=j_{sa})} \sum_{j_i=j^{sa}+s-j_{sa}} \\
 & \sum_{n_i=n+l_k}^n \binom{n_i-j_{ik}-k_1+1}{n_{ik}=n+l_k+l_{k_2}+l_{k_3}-j_{ik}} \\
 & \sum_{n_{sa}=n+l_{k_3}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-k_2} \binom{n_{sa}+j^{sa}-j_i-k_3}{n_s=n_{sa}+j^{sa}-j_i-k_3} \\
 & \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - j_{ik} - k_1 - 1)!} \cdot \\
 & \frac{(n_i - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{sa} - j^{sa} - k_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s - j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(n_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=l}^{\binom{D}{k}} \sum_{(j_s=1)}^{\binom{D}{j_s}} \\
 & \sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_{sa})} \sum_{j_i=s} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n_i-j_{ik}-k_1+1)}^{\binom{D}{n_{ik}}} \\
 & \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2} \sum_{(n_s=n_{sa}+j^{sa}-j_i-k_3)}^{\binom{D}{n_s}}
 \end{aligned}$$

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$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l = i \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\}$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)} \sum_{j_i=s}^{l_i-l+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n+\mathbb{k}_3-j^{sa}+1}^{(n_{sa}+j^{sa}-j_i-\mathbb{k}_3)} \sum_{(n_s=n-j_i+1)} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{(j_s)} (j_s = 1)$$

$$\sum_{j_{ik}=j_s} \sum_{j_{sa}^{ik}=j_{sa}} \sum_{j_i=s}$$

$$\sum_{n_i=n}^n (n_{ik}=n_i - j_{ik} - k_1 + 1)$$

$$\sum_{n_s=n_{ik}+j_{ik}-k_2} (n_s=n_{sa}+j_{sa}^{ik}-j_i-k_3)$$

$$\frac{(n_i - 2 \cdot j_s + j_{sa} - j_i - k_1 - k_2 - k_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (n + 2 \cdot j_s + j_{sa} - j_{sa}^s - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l = l \wedge l_i \leq l + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_{ik} + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_s - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=i}^{\binom{D}{l}} \sum_{(j_s=1)}^{\binom{D}{l}}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa})}^{\binom{l_{sa}-l+1}{j_s}} \sum_{j_i=j^{sa}+s}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2+j_{ik}+1)}^{\binom{n_i-j_{ik}-k_1+1}{j_s}} \sum_{(n_{sa}=n+k_3-j^{sa})} \sum_{(n_s=n-j_i+1)}^{\binom{n_{ik}+j_{ik}-j^{sa}-k_2}{j_s}}$$

$$\frac{(n_{ik}-n_{sa}-k_1-1)!}{(j_{ik}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-k_2)!} \cdot \frac{(n_{sa}-n_{sa}-k_3-1)!}{(n_{sa}-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-k_3)!} \cdot \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(l_{ik}-j_{ik}-l_s+1)! \cdot (j_{ik}-j_{sa}^{ik})!} \cdot \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!}$$

$$\sum_{k=i}^{\binom{D}{l}} \sum_{(j_s=1)}^{\binom{D}{l}}$$

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_{sa})}^{\binom{D}{l}} \sum_{j_i=s}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{ik}=n_i-j_{ik}-k_1+1)}^{\binom{D}{l}}$$

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$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{\binom{()}{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}} \frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - l_i)!}$$

$$D \geq n < n \wedge l = i \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} = l_{sa} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\}$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{\binom{()}{l}} \sum_{j_s=1}^{\binom{()}{l}}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{l_{ik}-i+1} \sum_{\binom{()}{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{\binom{()}{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}}^{(n_i-j_{ik}-\mathbb{k}_1+1)}$$

$$\sum_{n_{sa}=n+\mathbb{k}_3-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{\binom{()}{n_s=n-j_i+1}}^{(n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{l_i} \binom{()}{j_{sa}^{ik}}$$

$$\sum_{j_{ik}=j_{sa}^{ik}} \binom{()}{j_{sa}^{ik}}$$

$$\sum_{n+\mathbb{k}}^n \binom{()}{(n_{ik}=n_i - j_{ik} - \mathbb{k}_1 + 1)}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \binom{()}{(n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}$$

$$\frac{(n_i + 2 \cdot j_s^{sa} - j_i - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^s)!}{(n_i + n - \mathbb{k}_1 - \mathbb{k}_2 - j_i - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l = l_i \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_i \leq j_{ik} - j_{sa}^{ik} \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_i - j_{sa}^{ik} = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fz^{\mathcal{S}}_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=i}^{\binom{D}{k}} \sum_{(j_s=1)}^{\binom{D-k}{j_s}} \sum_{j_{ik}=j_{sa}^{ik}}^{\binom{l_{sa}-i^{l+1}}{j_{sa}^{sa}}} \sum_{j_i=s}^{\binom{l_i-i^{l+1}}{j_i}} \sum_{n_i=n_i+k}^n \sum_{(n_{ik}=n_i+k)}^{\binom{n_i-j_{ik}+1}{n_{ik}}} \sum_{n_{sa}=n_i+k}^{\binom{n_{ik}+j_{ik}-j^{sa}}{n_{sa}}} \sum_{(n_{sa}+j^{sa}-j_i)}^{\binom{n_{sa}+j^{sa}-j_i}{n_{sa}+j^{sa}-j_i}} \frac{(n_i - j_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 1)! \cdot (n_i - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_i - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{sa} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} - j_{sa})!} \cdot \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \sum_{k=i}^{\binom{D}{k}} \sum_{(j_s=1)}^{\binom{D-k}{j_s}} \sum_{j_{ik}=j_{sa}^{ik}}^{\binom{l_{sa}-i^{l+1}}{j_{sa}^{sa}}} \sum_{j_i=s}^{\binom{l_i-i^{l+1}}{j_i}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{\binom{()}{n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1}}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{\binom{()}{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{(D - l_i)}{(D + s - l_i)! (n - s)!}$$

$D \geq n < n \wedge l = i \wedge l_i \leq D + s - n \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i - j_{sa} \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa}^{ik} - j_{sa} > l_{sa}$

$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{ik} - 1 < j_{sa} - 1$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 7 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_2: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$fz^S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=i}^l \sum_{\binom{()}{j_s=1}}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{\binom{()}{j^{sa}=j_{sa}}} \sum_{j_i=s}^{(l_{sa}-i+1)l_i-i+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{\binom{()}{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}}$$

$$\sum_{n_{sa}=n+\mathbb{k}_3-j^{sa}+1} \sum_{\binom{()}{n_s=n-j_i+1}}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{sa}^{ik} - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{sa}^{ik} - j_{sa}^{ik})!} \cdot \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_{sa} - l_s + 1)! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=i}^{()} \sum_{j_s=1}^{()} l$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{()} \sum_{(j^{sa}=j_{sa})}^{()} \sum_{j_i=s}^{()}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{()}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}^{()}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l = i \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$\sum_{k=i}^{()} \sum_{l \ (j_s=1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{()} \sum_{(j^{sa}=j_{sa})} \sum_{j_i}$$

$$\sum_{n_i=n+l}^n \sum_{(n_{ik}=n_i-l-k_1+1)}^{()}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2}^{()} \sum_{(n_{sa}+j^{sa}-j_i)}^{()}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - k_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (n + 2 \cdot j_s - j_{sa} - j_i - k_3 - 2 \cdot j_{sa}^s)! \cdot (D - l_i)!}$$

$$(D + s - n - l_i)! \cdot (n - s)!$$

$$D \geq n < n \wedge l = i \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s \leq j_{sa}^{ik} - 1 \leq j_s \leq j^{sa} - j_{ik} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_{sa} + j_{sa}^{ik} - j_{sa} \wedge l_{ik} \wedge l_{sa} + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge l = k > 1 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa} < j_{sa} - 1 \wedge j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = k + k \wedge$$

$$k_2: \dots \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=i}^{()} \sum_{l \ (j_s=1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{l_{ik}-i+1} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{()} \sum_{j_i=s}^{l_i-i+1}$$

$$\begin{aligned}
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \\
 & \sum_{n_{sa}=n+\mathbb{k}_3-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=n-j_i+1)}^{(n_{sa}+j^{sa}-j_i-\mathbb{k}_3)} \\
 & \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
 & \frac{(n_s - j_i - n - j_i - 1)!}{(n_s - j_i - n - j_i - 1)!} \cdot \\
 & \frac{(l_{ik} - j_{sa} - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{sa} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} - j_{sa} - j_{sa}^{ik} - j_{sa})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=i}^{()} \sum_{(j_s=1)}^{()} \\
 & \sum_{j_{ik}=j_{sa}^{ik}}^{()} \sum_{(j^{sa}=j_{sa})}^{()} \sum_{j_i=s}^{()} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{()} \\
 & \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}^{()} \sum_{(n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}^{()} \\
 & \frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!}
 \end{aligned}$$

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$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l = l \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$\begin{aligned} j_{ik}^{sa}, j_{ik}, j_{sa}^{sa} &= \sum_{k=l}^n \sum_{(j_s=1)}^{(\cdot)} \\ &\sum_{j_{ik}=j_{sa}^{ik}}^{l_{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{s-i+l+1} \sum_{j_i=j^{sa}+s-j_{sa}} \\ &\sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2+k_3-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \\ &\sum_{n_{sa}=n+k_3-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-k_2} \sum_{(n_s=n-j_i+1)}^{(n_{sa}+j^{sa}-j_i-k_3)} \\ &\frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \\ &\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\ &\frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!} \cdot \\ &\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \end{aligned}$$

GÜLDÜNYA

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{k=1}^{(j_s)} \sum_{j_{ik}=j_{sa}^{ik}}^{(j_s)} \sum_{j_i=s}^{(j_s)} \sum_{n_i=n}^n \sum_{n_{ik}=n_i - j_{ik} - k_1 + 1}^{(j_s)} \sum_{n_s=n_{sa} + j_{sa}^{ik} - k_2}^{(j_s)} \sum_{n_s=n_{sa} + j_{sa}^{ik} - j_i - k_3}^{(j_s)} \frac{(n_i - 2 \cdot j_s + j_{sa} - j_{sa}^{ik} - j_i - k_1 - k_2 - k_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!} \cdot \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$D \geq n < n \wedge l = 1 \wedge l_i \leq 1 + s < n \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_{sa} + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$

$D \geq n < n \wedge l = k > 0 \wedge$

$j_{sa} - j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 7 \wedge s = s + k \wedge$

$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$

$$fzS_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=i}^{\dots} \sum_{j_s=1}^{\dots}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{l_{ik}-i+1} \sum_{(j^{sa}=j_{sa})}^{(l_{sa}-i+1)} \sum_{j_i=s}^{l_i-i+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2+j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)}$$

$$\sum_{n_{sa}=n+k_3-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-k_2} \sum_{(n_s=n-j_i+1)}^{(j^{sa}-k_3)}$$

$$\frac{(n_{ik}-n_{sa}-k_1-1)!}{(j_{ik}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-k_2-1)!}$$

$$\frac{(n_{ik}-n_{sa}-k_2-1)!}{(j_{ik}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-k_2-1)!}$$

$$\frac{(n_{sa}-n_{sa}-k_3-1)!}{(j_{ik}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-k_3-1)!}$$

$$\frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!}$$

$$\frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(l_{ik}-j_{ik}-l_s+1)! \cdot (j_{ik}-j_{sa}^{ik})!}$$

$$\frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}$$

$$\frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!}$$

$$\frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!}$$

$$\sum_{k=i}^{\dots} \sum_{j_s=1}^{\dots}$$

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_{sa})} \sum_{j_i=s}$$

GÜLDÜZMAYA

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{\binom{()}{n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1}}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{\binom{()}{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 2 \cdot j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + 2 \cdot j_s + j_{sa} - j^{sa} - j_i - 2 \cdot j_{sa}^s)!}$$

$$\frac{(D - l_i)!}{(D + s - l_i)! \cdot (n - s)!}$$

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, 2.3.3.3.1.1.4.1/1/4

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, 2.3.3.3.1.6.3.1/3-4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrisinin durumuna bağlı

tek kalan simetrik olasılık,
2.3.3.1.1.1.1.1/1

tek kalan düzgün simetrik olasılık,
2.3.3.2.1.1.1.1/80

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 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,
2.3.3.1.6.4.2.1/5-6

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,
2.3.3.1.6.6.2.1/5-6

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 bağımlı durumlu, 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.