

# VDOİHİ

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

Cilt 2.3.2.2.7.1.1.43

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 ilk düzgün simetrik olasılık Cilt 2.3.2.2.7.1.1.43**

*İsmail YILMAZ*

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## **KÜTÜPHANE BİLGİLERİ**

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

*Dili: Türkçe + Matematik Mantık*



*K. Atatürk*

Türkiye Cumhuriyeti Devleti  
Kuruluşunun  
100. Yılı Anısına

## 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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- ✓ 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

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

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

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

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

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

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



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

$f_Z S_{j_s^{sa},0}^{iS}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrisinin durumuna bağlı ilk simetrik olasılık

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

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

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

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

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

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

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

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

$f_Z S_{j_s,j^{sa}}^{iS}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrisinin ilk ve herhangi bir durumunun bulunabileceği olaylara göre ilk simetrik olasılık

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durumunun bulunabileceği olaylara göre ilk simetrik olasılık

$fzS_{j_s, j^{sa}, D}^{is}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrisinin ilk ve herhangi bir durumunun bulunabileceği olaylara göre ilk simetrik olasılık

$fz,0S_{j_s, j^{sa}}^{is}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu simetrisinin ilk ve herhangi bir durumunun bulunabileceği olaylara göre ilk simetrik olasılık

$fz,0S_{j_s, j^{sa}, 0}^{is}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımsız simetrisinin ilk ve herhangi bir durumunun bulunabileceği olaylara göre ilk simetrik olasılık

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$fzS_{j_{ik}, j^{sa}}^{is}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrisinin herhangi iki durumuna bağlı ilk simetrik olasılık

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durumunun bulunabileceği olaylara göre ilk simetrik olasılık

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$fz,0S_{\Rightarrow j_s, j_{ik}, j^{sa}, D}^{ISO}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımlı simetrisinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre herhangi iki duruma bağlı ilk düzgün olmayan simetrik olasılık

$fzS_{\Rightarrow j_s, j_{ik}, j_i}^{ISO}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı ilk düzgün olmayan simetrik olasılık

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herhangi bir ve son duruma bağlı ilk düzgün olmayan simetrik olasılık

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${}^0S_{\Rightarrow j_s, j_{ik}, j_i}^{ISO}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız veya bağımlı-bağımsız veya bağımsız-bağımsız durumlu simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı ilk düzgün olmayan simetrik olasılık

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

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herhangi iki ve son durumuna bağlı ilk düzgün olmayan simetrik olasılık

$fz \overset{ISO}{\Rightarrow}_{j_s, \Rightarrow j_{ik}, j^{sa}, j_i, D}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı ilk düzgün olmayan simetrik olasılık

$fz, 0 \overset{ISO}{\Rightarrow}_{j_s, \Rightarrow j_{ik}, j^{sa}, j_i}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı ilk düzgün olmayan simetrik olasılık

$fz, 0 \overset{ISO}{\Rightarrow}_{j_s, \Rightarrow j_{ik}, j^{sa}, j_i, 0}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımsız simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı ilk düzgün olmayan simetrik olasılık

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${}^0 \overset{ISO}{\Rightarrow}_{j_s, \Rightarrow j_{ik}, j^{sa}, j_i}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız veya bağımlı-bağımsız veya bağımsız-bağımsız durumlu simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı ilk düzgün olmayan simetrik olasılık

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

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

${}^0 \overset{ISO}{\Rightarrow}_{j_s, \Rightarrow j_{ik}, j^{sa}, j_i, D}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız veya bağımlı-bağımsız veya bağımsız-bağımsız durumlu bağımlı simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı ilk düzgün olmayan simetrik olasılık

# E2

## BAĞIMLI ve BİR BAĞIMSIZ OLASILIKLI FARKLI DİZİLİMSİZ DAĞILIMLAR

### Bağımlı ve Bir Bağımsız Olasılıklı Farklı Dizilimsiz Dağılımlar

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

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

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

Bağımlı dağılım ve bir bağımsız olasılıklı durumla oluşturulabilen dağılımlara ve bağımlı olasılıklı dağılımların kendi olay sayısından (bağımlı olay sayısı) büyük olmasına (bağımsız olay sayısı) dağılımla bağımlı ve bir bağımsız olasılıklı dağılımlar elde edilir. Kurallı 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 durumlu/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 dağılımlarındaki 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 düzenleneren küçükten-büyükçe sıralanan dağılımlar için de simetrik olasılık eşitlikleri elde edilecektir.

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

**SİMETRİDEN SEÇİLEN DÖRT DURUMA GÖRE İLK DÜZGÜN SİMETRİK OLASILIK**

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

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

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

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

$$l_i > D + l_{sa} + s - n - j_{sa}) \vee$$

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

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

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

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

$$l_i > D + l_s + s - n - 1) \vee$$

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

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

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

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

$$l_i > D + l_s + j_{sa}^{ik} - 1) \vee$$

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

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

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

$$l_i - j_{sa}^{ik} > l_s \wedge$$

$$l_i > D + l_s + s - n - 1)) \wedge$$

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

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

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

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

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

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

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

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

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

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

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

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

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

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

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

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

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

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

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

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

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

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

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

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

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{iss} = 0$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

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

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

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

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

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

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

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

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

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

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

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

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

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

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

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

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

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

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

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

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

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

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

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

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

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

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

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

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



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

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

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

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

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

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

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

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

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

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

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

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

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

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

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

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

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

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

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

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

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

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

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

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

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

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

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

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

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

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

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

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

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

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

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

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

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

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

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

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

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

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

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

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

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

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

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

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

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

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

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

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

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

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

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

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

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

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

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

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

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

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

$$s \geq 5 \wedge \mathbf{s} = \mathbf{s} + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

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

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

$$s \geq 5 \wedge \mathbf{s} = \mathbf{s} + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

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

$$\sum_{j_{ik}=j_{sa}^{ik}-j_{sa}}^{\infty} \sum_{j_i=j_{sa}^i-j_{sa}}^{\infty} \sum_{n=D-1}^{\infty}$$

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

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

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

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

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

$$((D \geq \mathbf{n} < n \wedge l_s = D - n + 1 \wedge$$

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

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

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

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

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



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

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

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

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

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

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

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

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

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

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

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

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

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

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

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

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

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

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

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

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

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

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

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

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



$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

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

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

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

$$\frac{(n_i + j_s + j_{ik}^{ik} - j_{ik} - I - j_{sa}^s)!}{(n_i - I)! \cdot (n_i + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$s \geq 7 \wedge s = s + k \wedge$$

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

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

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

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

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

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

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

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

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

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

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

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

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

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

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

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

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

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

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

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

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

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

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

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

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

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

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

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

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

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

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

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

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

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

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

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

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

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

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

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

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

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

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

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

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

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

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

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

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

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

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

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

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

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

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

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

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

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

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

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

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

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

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

$$D \geq n < n \wedge l_s = n + 1 \wedge$$

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

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

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

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

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

$$s \geq 7 \wedge s = s + k \wedge$$

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

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

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

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

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

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

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

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

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

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

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

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

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

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

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

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \vee$$

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

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

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

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

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

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \Rightarrow$$

$$fz \mathcal{D}_{j_s, j_{ik}, j^{sa}, j_i}^{ISS} = \sum_{k=1}^{(\cdot)} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\cdot)}$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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



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

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

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

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

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

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

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

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

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

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

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

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

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

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

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

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

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

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

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \Rightarrow$$

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

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

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

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

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - \mathbf{n} - I)! \cdot (\mathbf{n} + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$s \geq 7 \wedge s = s + k \wedge$$

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

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

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

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

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

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

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

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

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

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

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

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

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

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

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

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

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

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

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2) \vee$$

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

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

$$s \geq 5 \wedge s = s + k \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

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

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

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

$$\sum_{(n_{sa} = n_{ik} - j_s)}^{(\cdot)} \sum_{n_s = n_{ik} - j_i - \mathbb{k}_3}^{(\cdot)}$$

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

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

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

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

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

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

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

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

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

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

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

$$((D \geq n < n \wedge l_s > 0) \wedge$$

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

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

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

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

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

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

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

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

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

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

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

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

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

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

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

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

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

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

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

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

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

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

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

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

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

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

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+}^{( )} \sum_{j_{ik}=l_{k1}}^{( )}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-l_{k2})}^{( )} \sum_{(n_{sa}+j_{sa}-j_i)}^{( )}$$

$$\frac{(n_i + j_s + \dots - s - j_{sa}^s)!}{(n_i - n)! \cdot (n_{is} + j_{sa}^{ik} - j_{sa}^s)!}$$

$$(l_s - 2)!$$

$$(l_s j_s)! \cdot (j_s - 2)!$$

$$(D - l_i)!$$

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

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

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

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

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

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

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

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

$$l_{kz}: z = 3 \wedge l_k = l_{k1} + l_{k2} + l_{k3}) \vee$$

$$s \geq 6 \wedge n \wedge l_s > D - n + 1 \wedge$$

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

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

$$l_{kz}: z = 2 \wedge l_k = l_{k2} + l_{k3}) \vee$$

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

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

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

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$

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

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

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

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

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

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

$s \geq 5 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$

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

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

$s \geq 5 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$

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

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

$s \geq 5 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \vee$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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



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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$s \geq 7 \wedge s = s + k$$

$$k_z: z = 1 \wedge k = k_1 + k_2 + k_3) \vee$$

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

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

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

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

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

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

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

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

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

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

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

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

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

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

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

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

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

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

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

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

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \vee$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

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

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

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

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

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

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

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

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

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

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

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

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

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

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

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

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

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

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

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

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

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

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3)) \Rightarrow$$

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

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

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

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

$$\frac{(n_i + j_s + j_{sa}^{lk} - j_{ik} - j_{sa}^{lk_2})! \cdot (n - j_s)!}{(n_i - n - I)! \cdot (n + j_s - j_{sa}^{lk} - j_{ik} - j_{sa}^{lk_2})! \cdot (j_{sa}^{lk_2})!}$$

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

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

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

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

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

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

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

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

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

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

$$((D \geq n < n \wedge I = lk > 0 \wedge$$

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

$$I = s + lk \wedge$$

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

$$(D \geq n < n \wedge I = lk > 0 \wedge$$

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

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

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

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

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

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

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

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

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

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

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

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

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

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

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

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

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

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

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

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \Rightarrow$$

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

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

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

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

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

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

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

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

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

$s \geq 7 \wedge s = s + \mathbb{k} \wedge$

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

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

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

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

$\mathbb{k}_2: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$

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

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

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

$\mathbb{k}_2: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$

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

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

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

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

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

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

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

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

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

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

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

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

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \Rightarrow$$

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

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

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

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

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



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

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

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

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

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

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

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

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

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

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

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

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

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

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

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

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

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

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

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

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

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

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

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

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

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

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

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

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

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

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

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

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

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

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

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

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

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

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

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

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

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

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

$$s \geq 7 \wedge s = s + k \wedge$$

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

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

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

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

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

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

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

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

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

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

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

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

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

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

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

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

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

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

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

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

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

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

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

$$((D \geq \mathbf{n} < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

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

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

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

$$(D \geq \mathbf{n} < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$$

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

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

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

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

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

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

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

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

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

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

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

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

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

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

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

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

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

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

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

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

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

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

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

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

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

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

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

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

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

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

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

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

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

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

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

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$l_i - s + 1 > l_s \wedge$$

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

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

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

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

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

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

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

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

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

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

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

$$s \geq 5, s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

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

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



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

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

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

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

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

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

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

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

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

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

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

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

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

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

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

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

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

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

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

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$\begin{aligned} & f z \sum_{j_s, j_{ik}, j^{sa}, j_i}^{l s s} \sum_{k=1}^{(j_s=j_{ik}-j_{sa}^{ik}+1)} \sum_{(l_i=j_s)}^{(l_i=j_s)} \sum_{j_{ik}=j_{sa}^{ik}-j_{sa}}^{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j_i=j_{sa}^{ik}+s-j_{sa}}^{(j_i=j_{sa}^{ik}+s-j_{sa})} \\ & \sum_{n_i=1}^{(n_i=n)} \sum_{(n_{is}=n)}^{(n_{is}=n)} \sum_{j_s+1}^{(j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \\ & \sum_{n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}^{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}^{(n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3)} \\ & \frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!} \cdot \\ & \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\ & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \end{aligned}$$

$$((D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{ISS} = \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(j_s=j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_{sa}=j_{sa}^{ik}-j_i)}^{(j_{sa}=j_{sa}^{ik}-j_i)} \sum_{(n_i=n+\mathbb{k})}^{(n_i=n+\mathbb{k}-j_s)} \sum_{(j_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{(j_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{(n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3)}^{(n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3)} \frac{(n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_s - j_s - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$j_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

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$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$f_z S_{j_s, j_{ik}}^{ISS} j_i = \sum_{k=1}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)}$$

$$\sum_{=j_{sa}+j_{sa}^{ik}-j_{sa}}^{(l_{ik}+j_{sa}^{ik}-s)} \sum_{(j_{sa}=j_{sa}+1)} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-\mathbb{k}_2)}^{(\cdot)} \sum_{n_s=n_{sa}+j_{sa}^{ik}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$



$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n$$

$$l_i - s + 1 > l_s \wedge$$

$$l_i \leq D + s - n) \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

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$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$S_{j_{sa}^s, j_{sa}^{ik}, j_{sa}}^{i, s, j_i} = \sum_{k=1}^{\binom{()}{j_s=j_{ik}-j_{sa}^{ik}+1}} \sum_{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}^{\binom{l_s+j_{sa}-1}{j_{sa}=j_{sa}+1}} \sum_{j_i=j_{sa}+s-j_{sa}}^{\binom{n_i-j_s+1}{n_{i_s}=n+l_k-j_s+1}} \sum_{n_{ik}=n_{i_s}+j_s-j_{ik}-\mathbb{k}_1}^{\binom{()}{n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}^{\binom{()}{n_i+n+j_s+j_{sa}^{ik}-j_{ik}-s-I-j_{sa}^s}} \cdot \frac{(n_i+n-I)! \cdot (n+j_s+j_{sa}^{ik}-j_{ik}-s-j_{sa}^s)!}{(l_s-2)! \cdot (j_s-2)!} \cdot \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz_{j_s}^{i s s} j_{i k} j_{s a}^{i s} = \sum_{k=1}^{\infty} (j_s = j_{i k} + 1)$$

$$\sum_{j_{i k} = j_{s a}^{i k} + 1}^{l_i + j_{s a}^{i k} - s} (j_s = j_{i k} + 1) \sum_{j_{s a} = j_{s a} - j_{s a}}^{( )}$$

$$\sum_{n_i = n + \mathbb{k}}^n (n_i - j_s + 1) \sum_{n_{i k} = n_{i s} + j_s - j_{i k} - \mathbb{k}_1} (n_i - j_s + 1)$$

$$\sum_{n_{s a} = n_{i k} + j_{i k} - j_{s a} - \mathbb{k}_2} (n_{s a} = n_{s a} + j_{s a} - j_i - \mathbb{k}_3)$$

$$\frac{(n + j_s + j_{s a}^{i k} - j_{i k} - s - I - j_{s a}^s)!}{(n - I)! \cdot (n + j_s + j_{s a}^{i k} - j_{i k} - s - j_{s a}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{i k} - j_{s a}^{i k} + 1 \wedge j_s + j_{s a}^{i k} - 1 \leq j_{i k} \leq j^{s a} + j_{s a}^{i k} - j_{s a} \wedge$$

$$j_{s a}^{i k} \leq j^{s a} \leq j_i + j_{s a} - s \wedge j^{s a} + s - j_{s a} \leq j_i \leq n \wedge$$

$$l_{i k} - j_{s a}^{i k} + 1 = l_s \wedge l_{s a} + j_{s a}^{i k} - j_{s a} = l_{i k} \wedge l_i + j_{s a} - s = l_{s a}) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{i k} - j_{s a}^{i k} + 1 \wedge j_s + j_{s a}^{i k} - 1 \leq j_{i k} \leq j^{s a} + j_{s a}^{i k} - j_{s a} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{ISS} = \sum_{k=1} \sum_{(j_s = \dots - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik} = j_{sa}^{ik} + 1}^{l_{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j_{sa} = j_{ik} + \dots - j_{sa}^{ik})} \sum_{j_i = j_{sa}^s + s}$$

$$\sum_{n_i = \dots}^n \sum_{(n_{is} = n + \dots - i + 1)} \sum_{n_{ik} = n_{is} - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - \dots - \mathbb{k}_2)} \sum_{n_s = n_{sa} + j_{sa}^s - j_i - \mathbb{k}_3}$$

$$\frac{(n_i + \dots + j_{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - \dots - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$\sum_{j_s=j_{ik}-j_{sa}^{ik}+1}^{(n)} \sum_{j_i=j_{sa}^s-j_{sa}}^{(n)} \sum_{j_{ik}=j_{sa}^{ik}+1}^{(n)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{(n)} \sum_{n_i=n+\mathbb{k}}^{(n)} \sum_{n_{is}=n+\mathbb{k}-j_s+1}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(n_i-j_s+1)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(n)} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}^{(n)}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq \mathbf{n} < n \wedge l_s > 1 \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa}^s + j_{sa}^{ik} - j_{sa} \wedge$$





$$(D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$l_i \leq D + s - n)) \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\}$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

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$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

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$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

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$$s \geq 6 \wedge s = s + k \wedge$$

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$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$f_z S_{j_s, j_{ik}}^{ISS} j_i = \sum_{k=1}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)}$$

$$\sum_{i=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\cdot)} \sum_{j_i=j_{sa}^{ik}+s-j_{sa}}^{(\cdot)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(\cdot)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-\mathbb{k}_2)}^{(\cdot)} \sum_{n_s=n_{sa}+j_{sa}^{ik}-j_i-\mathbb{k}_3}^{(\cdot)}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

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$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

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$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

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$$s \geq 6 \wedge s = s + k \wedge$$

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$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z^{ISS} \sum_{k=1}^{(l_i-s+1)} \sum_{j_s=2}^{(l_i-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{lk}} \sum_{j_{ik}=j_s+j_{sa}^{lk}} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}} \sum_{n_i=n+\mathbb{k}-j_s} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_i=n_{ik}+j_{sa}^{lk}-\mathbb{k}_2)} \sum_{n_s=n_{sa}+j_{sa}^{lk}-j_i-\mathbb{k}_3}$$

$$\frac{+j_s+j_{sa}^{lk}-j_{ik}-s-I-j_{sa}^s)!}{(n_i-n_{is}-I)! \cdot (n+j_s+j_{sa}^{lk}-j_{ik}-s-j_{sa}^s)!}$$

$$\frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!}$$

$$\frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!}$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{lk} - 1 \wedge j_s + j_{sa}^{lk} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{lk} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{lk} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$j_{ik} - j_{sa}^{lk} - 1 = l_s \wedge l_{sa} + j_{sa}^{lk} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{lk} + 1 \wedge j_s + j_{sa}^{lk} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{lk} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{lk} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

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$$(D \geq n < n \wedge I = k > 0 \wedge$$

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$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

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$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i}^{ISS} = \sum_{k=1}^{(l_{sa}-j_{sa}+1)} \sum_{(j_s=2)}^{(l_{sa}-j_{sa}+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{( )} \sum_{(j^{sa}=j_{ik}+j_{sa})}^{( )} \sum_{(j_i=j^{sa}-j_{sa})}^{( )}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n_i+j_s-j_{ik}-\mathbb{k}_1)}^{(n_i-j_s+1)} n_{ik} \dots$$

$$\sum_{(n_{sa}=n_{ik}+j_s-j^{sa}-\mathbb{k}_3)}^{( )} \sum_{(n_i=n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}^{( )}$$

$$\frac{(j_i + j_s + j_{sa}^{ik} - j_{ik} - s - l - j_{sa}^s)!}{(n_i - n_{ik} - l)! \cdot (n + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > 1 \wedge l_i \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

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$$s \geq 6 \wedge s = s + k \wedge$$

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$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

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$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz S_{j_s, j_{sa}, j_i}^{i_s, j_{sa}, j_i} = \sum_{k=1}^{\mathbb{k}-j_{sa}^{ik}+1} \sum_{(j_s=2)}^{(j_s=2)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}-1}^{(j_{sa}-j_s+1)} \sum_{(j_s=2)}^{(j_s=2)} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\sum_{n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_{is}=n+\mathbb{k}-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!} \cdot$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

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$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

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$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

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$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

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$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$l_i \leq D + s - n)) \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

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$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = \mathbf{s} + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq \mathbf{n} < \mathbf{n} \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = \mathbf{s} + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq \mathbf{n} < \mathbf{n} \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = \mathbf{s} + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z^{l_s} S_{j_s, j_{sa}, j_i}^{l_s} = \sum_{k=1}^{(l_s)} \sum_{(j_s=2)}^{(l_s)}$$

$$\sum_{(j_s=j_s+j_{sa}^{ik})}^{(l_s)} \sum_{(j_s=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_s)} \sum_{(j_i=j_{sa}+s-j_{sa})}^{(l_s)}$$

$$\sum_{(n_i=n+\mathbb{k})}^{(n)} \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{(n_i-j_s+1)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-\mathbb{k}_2)}^{(n_i-j_s+1)} \sum_{(n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3)}^{(n_i-j_s+1)}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - \mathbf{n} - I)! \cdot (\mathbf{n} + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < \mathbf{n} \wedge l_s > 1 \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D < n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{ISS} = \sum_{k=1}^{( )} \sum_{(j_s = \dots - j_{sa}^{ik} + 1)}^{( )} \sum_{l_s = s - j_{sa}}^{( )} \sum_{j_{ik} = j_{sa} + j_{sa}^{ik} - j_{sa}}^{( )} \sum_{(j_s = \dots + j_{sa} - s)}^{( )} \sum_{j_i = l_i + \dots}^{( )} \sum_{n_i = \dots}^{( )} \sum_{(n_{is} = n_{is} + 1)}^{( )} \sum_{n_{ik} = \dots}^{( )} \sum_{(n_{sa} = n_{ik} + j_{ik} - \mathbb{k}_2)}^{( )} \sum_{n_s = n_{sa} + j_{sa} - j_i - \mathbb{k}_3}^{( )} \frac{(n_i + \dots + j_{sa}^{ik})!}{(n_i - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + \dots = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_{sa} < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$\begin{aligned} & \sum_{j_{ik}^{sa} + j_{sa}^{ik} - j_s}^{(n)} \sum_{j_{sa} = j_i + j_{sa} - s}^{(n_i - j_s + 1)} \sum_{j_i = l_i + n - D}^{l_{ik} + s - j_{sa}^{ik}} \\ & \sum_{n + \mathbb{k}}^{n} \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1} \\ & \sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)}^{(n)} \sum_{n_s = n_{sa} + j_{sa} - j_i - \mathbb{k}_3} \\ & \frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!} \cdot \\ & \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\ & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \end{aligned}$$

$$((D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$



$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{l_s} = \sum_{k=1}^{()} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik} = j_{sa} + j_{sa}^{ik} - j_{sa}}^{()} \sum_{(j_{sa} = j_i + j_{sa} - s)}^{()} \sum_{j_i = l_i + n - D}^{l_s + s - 1}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)}^{()} \sum_{n_s = n_{sa} + j_{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$\begin{aligned} & \sum_{j_{ik} = \dots + j_{sa}^{ik} - j_{sa}} \sum_{(j_{sa} = \dots + j_{sa} - D - s)} \sum_{j_i = j_{sa} + s - j_{sa}} \sum_{(n_i - \dots)} \\ & \sum_{= n + \mathbb{k}} \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)} \sum_{n_s = n_{sa} + j_{sa} - j_i - \mathbb{k}_3} \\ & \frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!} \cdot \\ & \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\ & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \end{aligned}$$

$$(D > n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz \mathcal{D}_{j_s, j_{ik}, j_{sa}, j_i}^{s, l, s} = \sum_{k=1} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{( )}$$

$$\sum_{i_k = j_{sa} + j_{sa}^{ik} - j_{sa}}^{(l_{ik} + j_{sa} - j_{sa}^{ik})} \sum_{(j_{sa} = l_i + n + j_{sa} - D - s)} \sum_{j_i = j_{sa} + s - j_{sa}}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)}^{( )} \sum_{n_s = n_{sa} + j_{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$



$$(D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \wedge$$

$$((D \geq n < n \wedge l_s > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, l_{sa}, j_{sa}^{ik}, l_{sa}, l_{sa}, j_{sa}^i, \dots, l_{sa}, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + l_s \wedge$$

$$l_{sa}: z = l_{sa} \wedge l_{sa} = l_{sa} + l_{sa} + l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s = l_s > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, l_{sa}, j_{sa}^{ik}, l_{sa}, j_{sa}^i, \dots, l_{sa}, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + l_s \wedge$$

$$l_{sa}: z = l_{sa} \wedge l_{sa} = l_{sa} + l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s = l_s > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, l_{sa}, j_{sa}^{ik}, l_{sa}, j_{sa}^i, \dots, l_{sa}, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + l_s \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\}$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \vee$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{iss} = \sum_{k=1}^{()} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik} = j_{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j_{sa} = l_i + n + j_{sa} - D - s)}^{(l_s + j_{sa} - 1)} \sum_{j_i = j_{sa} + s - j_{sa}}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)}^{()} \sum_{n_s = n_{sa} + j_{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - l_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

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$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

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$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

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$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$S_{j_i, j_i}^{i, s, s} = \sum_{k=1}^{\binom{()}{j_s=j_{ik}-j_{sa}^{ik}+1}}$$

$$\sum_{j_{sa}^{ik}-D-s}^{\binom{()}{j_{sa}^{ik}-j_{sa}}} \sum_{j_i=j_{sa}^{ik}+s-j_{sa}}^{\binom{()}{j_{sa}^{ik}-j_{sa}}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_i=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-\mathbb{k}_2)}^{\binom{()}{n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-\mathbb{k}_2}} \sum_{n_s=n_{sa}+j_{sa}^{ik}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1)) \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\}$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \vee$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{iss} = \sum_{k=1}^{\binom{()}{j_s=j_{ik}-j_{sa}^{ik}+1}}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_{ik}} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{\binom{()}{j_i=j_{sa}+s-j_{sa}}} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_i=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-k_2)}^{\binom{()}{n_s=n_{sa}+j_{sa}-j_i-k_3}} \sum_{n_s=n_{sa}+j_{sa}-j_i-k_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - l - j_{sa}^s)!}{(n_i - n - l)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - l_i)!}$$

$$((D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0) \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$(\mathbb{k}_2 \leq s \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$



$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\}$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

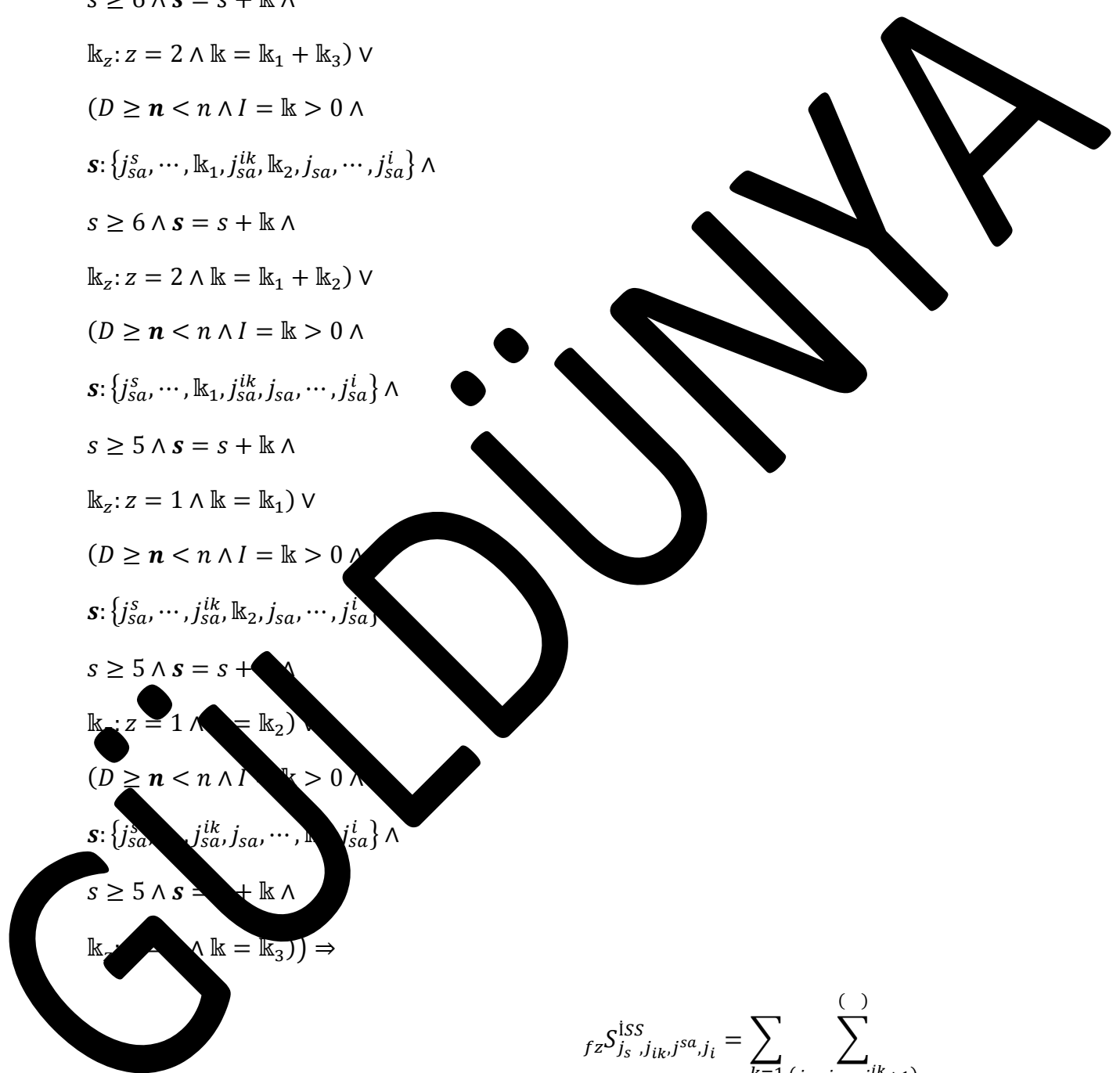
$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i}^{ISS} = \sum_{k=1} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik} = l_i + n + j_{sa}^{ik} - D - s}^{l_s + j_{sa}^{ik} - 1} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})} \sum_{j_i = j^{sa} + s - j_{sa}}$$



$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_2} \frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!} \cdot \frac{(l_s - 2)!}{(l_s - 1)! \cdot (l_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - l_i - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} - j_{sa}^{ik} - j_{sa}$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j_i + s - j_{sa} \leq j_{ik} < n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_i - l_i = l_{ik} \wedge l_i - j_{sa} - s > 0 \wedge$$

$$D + s - n < l_i \leq D + l_s - n - 1 \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\}$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3 \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \dots) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{ISS} = \sum_{k=1}^{(I_{sa}-j_{sa}+1)} \sum_{(j_s=l_i+n-D-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{lk}-1} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{( )} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_1, \mathbb{k}_2, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \vee$$

$$f_z^{S_{js, j_{ik}, j_{sa}, j_i}^{ISS}} = \sum_{k=1} \sum_{(j_s = l_i + n - D - s + 1)}^{(l_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik} = j_s + j_{sa}^{ik} - 1} \sum_{(j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})} \sum_{j_i = j_{sa} + s - j_{sa}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{i_s}+j_s-j_{ik}-l_{k_1}} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{(\cdot)} \sum_{n_s=n_{sa}+j^{sa}-j_i-l_{k_2}} \frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - l - j_{sa}^s)!}{(n_i - n - l)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!} \cdot \frac{(l_s - 1)!}{(l_s - 1)! \cdot (s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - l_i - l_i)! \cdot (n - j_i)!}$$

$$\begin{aligned} & ((D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1) \vee \\ & 1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge \\ & D + s - n < l_i \leq D + l_s + s - n - 1) \vee \\ & ((D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1) \vee \\ & 1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge \\ & D + s - n < l_i \leq D + l_s + s - n - 1) \vee \\ & ((D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1) \vee \\ & 1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge \\ & D + s - n < l_i \leq D + l_s + s - n - 1) \vee \\ & ((D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1) \vee \\ & 1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \end{aligned}$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$(D + s - n < l_i \leq D + l_s + s - n - 1)) \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\}$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$



$$fz S_{j_s, j_{ik}, j^{sa}, j_i}^{iSS} = \sum_{k=1} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{( )} \sum_{j_i=j^{sa}+s-j_i}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_1)}^{( )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i + j_s - j_{ik} - s - j_{sa}^s)!}{(n_i - n + l)! \cdot (n_{is} + j_{sa} - j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s = D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + l_s - n < l_{sa} \leq D + l_s + l_i - n - 1 \wedge$$

$$(D \geq n < n \wedge l = k > 0) \wedge$$

$$s: \{j_s^s, \dots, k_1, j_{sa}^s, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$z = 2 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge l = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \vee$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{ISS} = \sum_{k=1} \sum_{(j_s = j_{ik} - j_{sa} + 1)}^{( )}$$

$$\sum_{j_{ik} = j_{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j_{sa} = j_i + j_{sa} - s)}^{( )} \sum_{j_i = l_{sa} + n + s - D - j_{sa}}^{l_{ik} + s - j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{i_s}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{i_s}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_2} \frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!} \cdot \frac{(l_s - 1)!}{(l_s - 1)! \cdot (l_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - l_i - l_i)! \cdot (n - j_i)!}$$

$$\begin{aligned} & ((D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge \\ & 1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge \\ & D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee \\ & ((D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge \\ & 1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} < j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge \\ & D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee \\ & ((D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge \\ & 1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge \\ & D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge \\ & ((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge \\ & s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge \end{aligned}$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i}^{ISS} = \sum_{k=1}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\cdot)} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\cdot)} \sum_{j_i=l_{sa}+n+s-D-j}^{l_s+s-1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-k_1}^{(\cdot)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_1)}^{(\cdot)} \sum_{(n_s=n_{sa}+j^{sa}-j_i)}^{(\cdot)}$$

$$\frac{(n_i + j_s - k_1 - s - j_{sa}^s)!}{(n_i - n + l)! \cdot (n_{is} + j_{sa} - k_1 - j_{sa}^s)!} \cdot \frac{(l_s - 2)!}{(l_s + j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > 1 \wedge l_s \leq n - n + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \wedge j_i + j_{sa} - s \wedge j^{sa} - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_{sa} + j_{sa}^{ik} - j_{sa} \wedge l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$D + j_s - n < l_{sa} \leq l_s + j_{sa} - n - 1 \wedge$

$(D \geq n < n \wedge l = k > 0) \wedge$

$s: \{j_s^s, \dots, k_1, j_{sa}^i, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 7 \wedge s = s + k \wedge$

$(z = s, k = k_1 + k_2 + k_3) \vee$

$(D \geq n < n \wedge l = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}^i, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k \wedge$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\}$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{ISS} = \sum_{k=1} \sum_{(j_s = j_{ik} - j_{sa} + 1)}^{( )}$$

$$\sum_{j_{ik} = j_{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j_{sa} = l_{sa} + n - D)}^{(l_{ik} + j_{sa} - j_{sa}^{ik})} \sum_{j_i = j_{sa} + s - j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{i_s}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{i_s}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_2} \frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!} \cdot \frac{(l_s - 1)!}{(l_s - 1)! \cdot (l_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - l_i - l_i)! \cdot (n - j_i)!}$$

$$\begin{aligned} & ((D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge \\ & 1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge \\ & D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee \\ & ((D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge \\ & 1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} < j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge \\ & D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee \\ & ((D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge \\ & 1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge \\ & D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge \\ & ((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge \\ & s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge \end{aligned}$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \dots) \vee$$

$$(D \geq \dots < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq \dots = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \dots = \mathbb{k}_2) \vee$$

$$(D \geq \dots < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$



$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{ISS} = \sum_{k=1}^{( )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{( )}$$

$$\sum_{j_{ik}=j_{sa}+j_{sa}^{lk}-j_{sa}}^{(l_s+j_{sa}-1)} \sum_{(j_{sa}=l_{sa}+n-D)}^{(l_s+j_{sa}-1)} \sum_{j_i=j_{sa}+s-j_{ik}}^{( )}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-k_1}^{( )}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-k_1)}^{( )} \sum_{(n_{sa}=n_{sa}+j_{sa}-j_i)}^{( )}$$

$$\frac{(n_i + j_s - s - j_{sa}^s)!}{(n_i - n + l)! \cdot (n_{is} + j_{sa} - j_{sa}^s)!} \cdot \frac{(l_s - 2)!}{(l_s + j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq n - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{lk} - 1 \leq j_{ik} \leq l_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - s \wedge j_{sa}^{lk} - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_{sa} + j_{sa}^{lk} - j_{sa} \wedge l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq l_s + j_{sa} - n - 1 \wedge$$

$$(D \geq n < n \wedge l = k > 0) \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{lk}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$(z = s, k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge l = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\}$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i}^{ISS} = \sum_{k=1}^{\binom{()}{j_s=j_{ik}-j_{sa}+1}} \sum_{\binom{()}{j_s=j_{ik}-j_{sa}+1}}$$

$$\sum_{j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa}}^{l_{ik}} \sum_{\binom{()}{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{i_s} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{i_s} + j_s - j_{ik} - \mathbb{k}_1} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\quad)} \sum_{n_s = n_{sa} + j^{sa} - j_i - \mathbb{k}_2} \frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!} \cdot \frac{(l_s - 1)!}{(l_s - 1)! \cdot (s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - l_i - l_i)! \cdot (n - j_i)!}$$

$$\begin{aligned} & ((D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1) \wedge \\ & 1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge \\ & D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee \\ & ((D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1) \wedge \\ & 1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge \\ & D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee \\ & ((D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1) \wedge \\ & 1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge \\ & D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge \\ & ((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge \\ & s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge \end{aligned}$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \dots) \vee$$

$$(D \geq \dots < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq \dots = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \dots = \mathbb{k}_2) \vee$$

$$(D \geq \dots < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i}^{iss} = \sum_{k=1}^{()} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik} = l_{sa} + n + j_{sa}^{ik} - D - j_{sa}}^{l_s + j_{sa}^{ik} - 1} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})} \sum_{j_i = j^{sa} + s - 1}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{()} \sum_{(n_{sa} + j^{sa} - j_i = \dots)}$$

$$\frac{(n_i + j_s + \dots - s - j_{sa}^s)!}{(n_i - n + \dots)! \cdot (n_{is} + j_{sa}^{ik} - j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq \dots - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq \dots + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = \dots \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + \dots - n < l_{sa} \leq \dots + l_s + j_{sa} - n - 1 \wedge$$

$$((D \geq n \dots \wedge I = \mathbb{k} > \dots) \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = \dots + \mathbb{k} \wedge$$

$$\dots (\mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\}$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

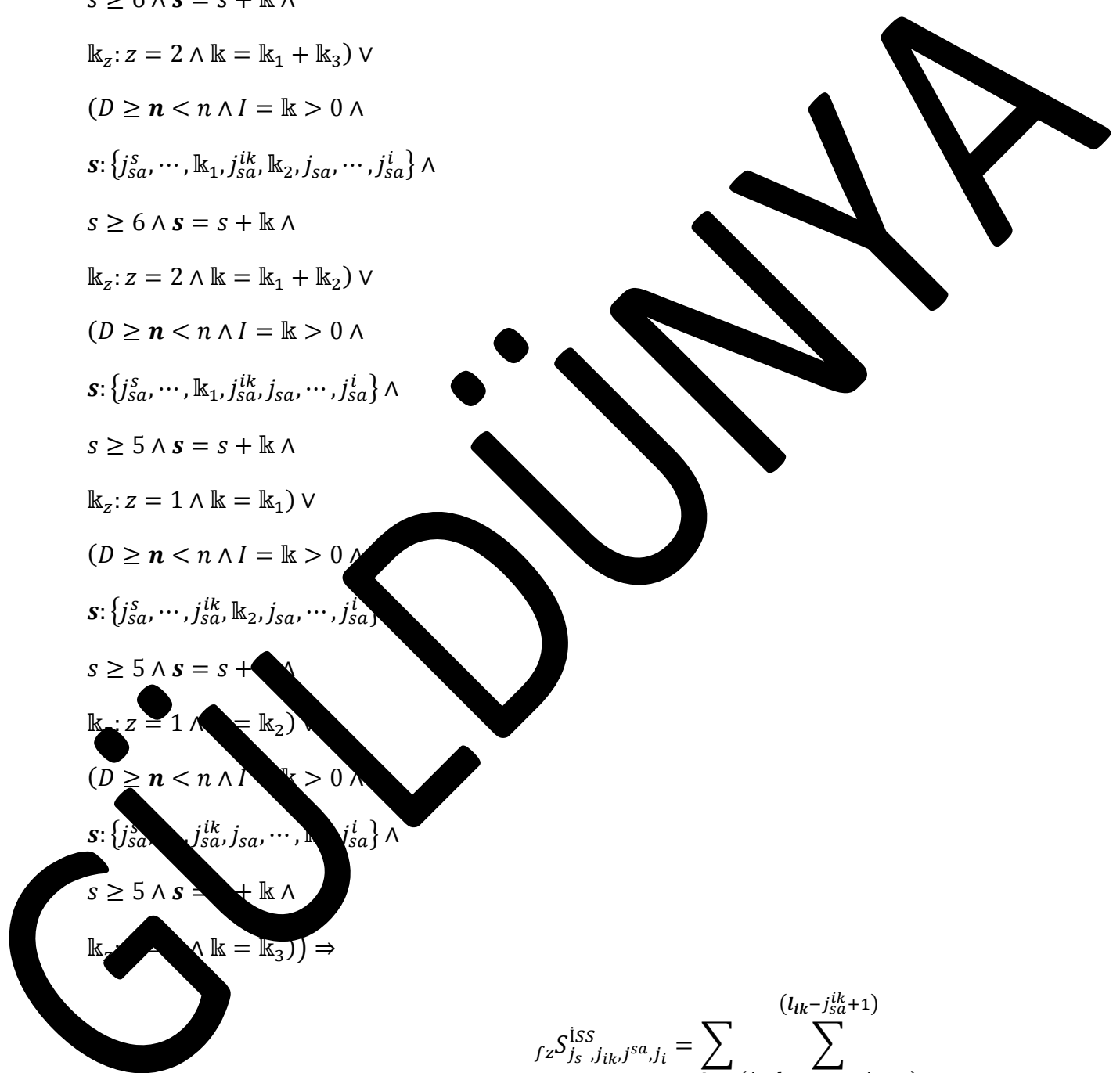
$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{iSS} = \sum_{k=1}^{(l_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{( )} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{( )} \sum_{j_i=j_{sa}^{sa}+s-j_{sa}}$$



$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{i_s}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{i_s}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_2} \frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!} \cdot \frac{(l_s - 1)!}{(l_s - 1)! \cdot (l_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - l_i - l_i)! \cdot (n - j_i)!}$$

$$\begin{aligned} & ((D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge \\ & 1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge \\ & D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee \\ & ((D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge \\ & 1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} < j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge \\ & D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee \\ & ((D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge \\ & 1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge \\ & D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge \\ & ((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge \\ & s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge \end{aligned}$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \Rightarrow$$



$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{iSS} = \sum_{k=1}^{(l_s)} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_s)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{( )} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{( )} \sum_{j_i=j_{sa}+s-j_{sa}^{ik}}^{( )}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-k_1}^{( )}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik})}^{( )} \sum_{(n_s=n_{sa}+j_{sa}^{ik}-j_i)}^{( )}$$

$$\frac{(n_i + j_s - j_{sa}^{ik} - s - j_{sa}^s)!}{(n_i - n + l)! \cdot (n_{is} + j_{sa}^{ik} - j_{sa}^s - j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s = n - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq n - a + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa}^{ik} \leq j_{sa}^{ik} \leq j_i + j_{sa} - s \wedge j_{sa}^{ik} - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > 0 \wedge l_{sa} + j_{sa}^{ik} - j_{sa}^{ik} \wedge l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq n + l_s + j_{sa}^{ik} - n - 1 \wedge$$

$$(D \geq n < n \wedge l = k > 0) \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}^s, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$z = 2 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge l = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}^s, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \vee$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{ISS} = \sum_{k=1} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{( )}$$

$$\sum_{j_{ik} = j_{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j_{sa} = j_i + j_{sa} - s)}^{( )} \sum_{j_i = l_{ik} + s + n - D - j_{sa}^{ik}}^{l_s + s - 1}$$

$$\sum_{n_i = n + k}^n \sum_{(n_i = n + k - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{( )} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3} \frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_{ik} < n$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - j_{ik} \wedge l_i + j_{sa} - s = l_s \wedge$

$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1 \wedge$

$((D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 7 \wedge s = s + k \wedge$

$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k \wedge$

$k_z: z = 2 \wedge k = k_2 + k_3) \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 5 \wedge s = s + k \wedge$

$k_z: z = 2 \wedge k = k_1 + k_3) \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$$s \geq 6 \wedge \mathbf{s} = \mathbf{s} + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = \mathbf{s} + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = \mathbf{s} + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = \mathbf{s} + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{ISS} = \sum_{k=1}^{(\cdot)} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik} = j_{sa} + j_{sa}^{ik} - j_{sa}}^{(l_s + j_{sa} - 1)} \sum_{(j_{sa} = l_{ik} + n + j_{sa} - D - j_{sa}^{ik})} \sum_{j_i = j_{sa} + s - j_{sa}}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)}^{(\cdot)} \sum_{n_s = n_{sa} + j_{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1 \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$S_{j_s, j_{ik}}^{ISS} = \sum_{k=1}^{\binom{()}{j_s=j_{ik}-j_{sa}^{ik}+1}}$$

$$\sum_{j_{ik}=l_s+j_{sa}^{ik}-1}^{\binom{()}{n-D(j_{sa}^{ik}+j_{sa}-j_{sa}^{ik})}} \sum_{j_i=j_{sa}^{ik}+s-j_{sa}}$$

$$\sum_{n+l_k}^{\binom{()}{n+l_k}} \sum_{(n_{is}=n+l_k-j_s+1)}^{\binom{()}{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-\mathbb{k}_2)}^{\binom{()}{n_s=n_{sa}+j_{sa}^{ik}-j_i-\mathbb{k}_3}}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1 \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{iSS} = \sum_{k=1}^{(l_s)} \sum_{(j_s = l_{ik} + n - j_{sa}^{ik} + 1)}^{(l_s)}$$

$$\sum_{j_{ik} = j_s + j_{sa}^{ik} - 1}^{(j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})} \sum_{j_i = j_{sa} + s}^{(j_i = j_{sa} + s)}$$

$$\sum_{n_i = n - j_{sa}^{ik} + j_{sa} + 1}^{(n_i = n - j_{sa}^{ik} + j_{sa} + 1)} \sum_{n_{ik} = n - j_{sa}^{ik} + j_{sa} - \mathbb{k}_1}^{(n_{ik} = n - j_{sa}^{ik} + j_{sa} - \mathbb{k}_1)}$$

$$\sum_{(n_{sa} = n_{ik} + j_{sa} - \mathbb{k}_2)}^{(n_{sa} = n_{ik} + j_{sa} - \mathbb{k}_2)} \sum_{n_s = n_{sa} + j_{sa} - j_i - \mathbb{k}_3}^{(n_s = n_{sa} + j_{sa} - j_i - \mathbb{k}_3)}$$

$$\frac{(n_i + j_{sa}^{ik} + j_{sa} - j_{sa}^{ik} - s - I - j_{sa}^s)!}{(n_i - s - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$z \leq j_s \leq j_{sa} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_i \leq j_i + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + j_{sa} = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$



$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

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$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

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$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i}^{iss} = \sum_{k=1} \sum_{(j_s = j_{ik} + l_s - l_{ik})}^{( )}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{( )} \sum_{j_i=l_i+n-D}^n$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{( )} \sum_{n_s=n_{sa}+j_s-j_i-k_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - j_s)!}{(n_i - n - l)! \cdot (n + j_s - j_{sa}^{ik} - j_{ik} - j_s)!} \cdot \frac{(l - j_s)!}{(l_s - 2)! \cdot (j_s - 2)!} \cdot \frac{(D - j_s)!}{(D + j_s - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{ik} - 1 < j_{ik} \leq j_{sa}^{ik} + j_{sa}^{ik} - j_{ik} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_{ik} - j_{sa} - s \wedge j^{sa} - j_{sa} - s \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_{sa} + j_{sa} - s > l_{sa} \wedge$$

$$((D \geq n < n \wedge l_s > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k$$

$$k_z: z = 1 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge l_s = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge l_s = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

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$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

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$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

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$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\}$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \vee$$

$$fz^i S_{j_s, j_{ik}, j_{sa}, j_i}^{ISS} = \sum_{k=1} \sum_{(j_s = j_{ik} + l_s - l_{ik})}^{( )}$$

$$\sum_{j_{ik} = j_{sa} + l_{ik} - l_{sa}} \sum_{(j_{sa} = j_i + j_{sa} - s)}^{( )} \sum_{j_i = l_i + n - D}^n$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_i = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)}^{( )} \sum_{n_s = n_{sa} + j_{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - l_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\}$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

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$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

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$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

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$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$f_z S_{j_s, j_{ik}}^{iss} j_i = \sum_{k=1}^{()} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()} \\ = \sum_{j_{sa}+j_{sa}^{ik}-j_{sa}}^{()} \sum_{(j_{sa}=j_i+l_i-l_{sa})}^{()} \sum_{j_i=l_i+n-D}^n \\ \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3} \\ \frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!} \cdot \\ \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\ \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

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$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

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$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 5 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{ISS} = \sum_{k=1} \sum_{(j_s = \dots - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik} = j_{sa} + l_{ik} - l_{sa}} \sum_{(j_s = \dots + l_{sa} - l_i)} \sum_{j_i = l_i + \dots}$$

$$\sum_{n_i = \dots}^n \sum_{\mathbb{k} (n_{is} = n_{is} + j_s + 1)} \sum_{n_{ik} = \dots} \sum_{j_{ik} = \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)} \sum_{n_s = n_{sa} + j_{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i + j_{sa}^{ik} + j_{sa} - j_{ik} - s - I - j_{sa}^s)!}{(n_i + j_{sa} - I)! \cdot (n_i + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > D > n + 1 \wedge$

$l_s \leq j_s \leq j_s - j_{sa}^{ik} + 1 \wedge s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} = j_i + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + j_{sa} = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 7 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$

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$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

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$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

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$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i}^{iss} = \sum_{k=1} \sum_{(j_s = j_{ik} + l_s - l_{ik})}^{( )}$$



$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{\binom{()}{j^{sa}=j_i+j_{sa}-s}} \sum_{j_i=l_i+n-D}^n$$

$$\sum_{n_i=n+k}^n \sum_{\binom{(n_i-j_s+1)}{n_{is}=n+k-j_s+1}} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{\binom{()}{n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2}} \sum_{n_s=n_{sa}+j_s-j_i-k_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - j_{sa}^i - j_{sa}^i)!}{(n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - j_{sa}^i - j_{sa}^i)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s - 1)! \cdot (j_s - 2)!}$$

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$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} \leq j_{ik} \leq j_s + j_{sa}^{ik} - j_{sa}^i \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} - j_{sa} - j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa}^i = l_{ik} \wedge l_{sa} + j_{sa} - s > l_{sa} \wedge$

$((D > n < n \wedge I = l_s > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}^i, \dots, k_3, j_{sa}^i\}$

$s \geq 6 \wedge s = s + k$

$k_2: z = 2 \wedge k = k_1 + k_2 + k_3) \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}^i, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k \wedge$

$k_2: z = 2 \wedge k = k_2 + k_3) \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}^i, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k \wedge$

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$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\}$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \vee$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{iss} = \sum_{k=1}^{()} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik} = j_{sa}^{ik} + l_{ik} - l_{sa}}^{()} \sum_{(j_{sa} = j_i + j_{sa} - s)}^{()} \sum_{j_i = l_i + n - D}^n$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa}^{ik} - \mathbb{k}_2)}^{()} \sum_{n_s = n_{sa} + j_{sa}^{ik} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - l_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\}) \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

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$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

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$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$f_z S_{j_s, j_{ik}}^{ISS} j_i = \sum_{k=1}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)}$$

$$= \sum_{=j_{sa}+j_{sa}^{ik}-j_{sa}}^{(\cdot)} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{(\cdot)} \sum_{j_i=l_i+n-D}^n$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\cdot)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!} \cdot$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

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$$(D \geq n < n \wedge I = k > 0 \wedge$$

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$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z^{l_{ss}} S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{j_s=j_{ik}+j_{sa}-l_{ik}}^{( )} \sum_{j_{ik}=j_{sa}+l_{ik}-l_{sa}}^{( )} \sum_{j_i=j_{sa}-l_i}^{( )} \sum_{n_i=n+\mathbb{k}}^{( )} \sum_{n_i=n+\mathbb{k}-j_s}^{( )} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{( )} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}^{( )} \frac{(j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\geq n < n \wedge l_s > D - 1 + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa} \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_s - j_{sa}^{ik} = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

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$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i}^{iss} = \sum_{k=1} \sum_{(j_s = j_{ik} + l_s - l_{ik})}^{( )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{\binom{()}{j^{sa}=j_i+l_{sa}-l_i}} \sum_{\binom{n}{j_i=l_{sa}+n+s-D-j_{sa}}}$$

$$\sum_{n_i=n+k}^n \sum_{\binom{(n_i-j_s+1)}{n_{is}=n+k-j_s+1}} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{\binom{()}{n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2}} \sum_{\binom{()}{n_s=n_{sa}+n_{ik}-j_i-k_3}}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - j_{sa} - j_s)!}{(n_i - n - I)! \cdot (n + j_s - j_{sa}^{ik} - j_{ik} - j_{sa} - j_s)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s - 1)! \cdot (j_s - 2)!} \cdot \frac{(D - j_s - j_{sa} - j_{ik} - j_{sa} - j_i)!}{(D + j_s - j_{sa} - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} \leq j_{ik} \leq j_s + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_{ik} + j_{sa} - s \wedge j^{sa} - j_{sa} - j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_{sa} - j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = j_s > 0 \wedge$$

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$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\}$$

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$$fz S_{j_s, j_{ik}, j_{sa}, j_i}^{iss} = \sum_{k=1}^{()} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik} = j_{sa} + l_{ik} - l_{sa}}^{()} \sum_{(j_{sa} = j_i + l_{sa} - l_i)}^{()} \sum_{j_i = l_{sa} + n + s - D - j_{sa}}^n$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)}^{()} \sum_{n_s = n_{sa} + j_{sa} - j_i - \mathbb{k}_3}$$

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$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

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$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_i}^{ISS} = \sum_{k=1}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}-j_{sa}}^{(\cdot)} \sum_{(j_{sa}=j_i+l_{sa}-l_i)}^{(\cdot)} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^n$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(\cdot)} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

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$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

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$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{ISS} = \sum_{j_s=j_{ik}+j_{sa}-l_{ik}} \binom{()}{j_s} \sum_{j_{ik}=j_{sa}+l_{ik}-l_{sa}} \binom{()}{j_{ik}} \sum_{j_i=l_{sa}-l_i} \binom{()}{j_i} \sum_{n_i=n+l_k} \binom{()}{n_i} \sum_{n_{ik}=n+l_k-j_s} \binom{()}{n_{ik}} \sum_{n_s=n_{sa}+j_{sa}-j_i-l_{k_1}} \binom{()}{n_s} \sum_{n_s=n_{sa}+j_{sa}-j_i-l_{k_2}} \binom{()}{n_s} \sum_{n_s=n_{sa}+j_{sa}-j_i-l_{k_3}} \binom{()}{n_s} \frac{+j_s+j_{sa}^{ik}-j_{ik}-s-I-j_{sa}^s)!}{(n_i-n_{ik}-I)! \cdot (n+j_s+j_{sa}^{ik}-j_{ik}-s-j_{sa}^s)!} \cdot \frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!} \cdot \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!}$$

$$\geq n < n \wedge l_s > D - \dots + 1 \wedge$$

$$2 \leq j_i \leq j_{ik} - j_{sa} \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - s \wedge j_{sa}^{ik} + s - j_{sa} \leq j_i \leq n \wedge$$

$$j_{sa} - j_{sa}^{ik} - 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\}$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i}^{ISS} = \sum_{k=1}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()} \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{()} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{()} \sum_{j_i=l_{ik}+s+n-D-}^{n} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-k_1}^{()} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{n_{sa}=n_{sa}+j^{sa}-j_i}^{()} \frac{(n_i + j_s - s - j_{sa}^s)!}{(n_i - n + l_i)! \cdot (n_{is} + j_{sa} - j_i - j_{sa}^s)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > D - n \wedge I = k > 0 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa}^{ik} - j_{sa}^{ik} \leq j_i + j_{sa} - s \wedge j^{sa} + j_{sa} - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_{sa} + j_{sa}^{ik} - j_{sa}^{ik} \wedge l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$((D - n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 7 \wedge s = s + k$

$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$

$D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k \wedge$

$k_z: z = 2 \wedge k = k_2 + k_3) \vee$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \vee$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{iss} = \sum_{k=1} \sum_{(j_s = j_{ik} + l_s - l_{ik})}^{( )}$$

$$\sum_{j_{ik} = j_{sa} + l_{ik} - l_{sa}} \sum_{(j_{sa} = j_i + l_{sa} - l_i)}^{( )} \sum_{j_i = l_s + n + s - D - 1}^n$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$



$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{( )} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3} (n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)! / ((n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!)$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_s)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} - s - j_{sa} \leq j_s < n$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - j_{ik} \wedge l_i + j_s - s = l_s \wedge$

$((D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j^i\} \wedge$

$s \geq 7 \wedge s = s + k \wedge$

$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k$

$k_z: z = 2 \wedge k = k_2 + k_3 \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k \wedge$

$k_z: z = 2 \wedge k = k_1 + k_3 \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k \wedge$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{l_s} = \sum_{k=1}^{\binom{()}{}} \sum_{(j_s = j_{ik} + l_s - l_{ik})}$$

$$\sum_{j_{ik} = j_{sa} + l_{ik} - l_{sa}}^{(n + j_{sa} - s)} \sum_{(j_{sa} = l_i + n + j_{sa} - D - s)} \sum_{j_i = j_{sa} + l_i - l_{sa}}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)}^{\binom{()}{}} \sum_{n_s = n_{sa} + j_{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz S_{j_s, j_{ik}, j_{sa}, j_i}^{ISS} = \sum_{k=1}^{\mathbb{k}} (j_s = j_{ik} - \mathbb{k}_k)$$

$$\sum_{j_{ik} = a+l}^{\mathbb{k}} \sum_{l_{sa} = j_{sa} - l}^{\mathbb{k}} \sum_{n+j_{sa} - s}^{\mathbb{k}} \sum_{n+j_{sa} - s - j_{sa}}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_i - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)}^{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)} \sum_{n_s = n_{sa} + j_{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$2 \leq j_s \leq j_{sa} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{sa} + j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - s \wedge j_{sa}^{ik} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

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$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{iSS} = \sum_{k=1}^{( )} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )}$$

$$\sum_{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}^{(n+j_{sa}-s)} \sum_{(j_{sa}=l_i+n+j_{sa}-D-s)}^{(n+j_{sa}-s)} \sum_{j_i=j_{sa}+l_i-l_{ik_1}}^{(n+j_{sa}-s)}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-k_1}^{(n_i-j_s+1)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-l_{ik_1})}^{( )} \sum_{(n_s=n_{sa}+j_{sa}-j_i)}^{( )}$$

$$\frac{(n_i + j_s - j_{ik} - s - j_{sa})!}{(n_i - n + l)! \cdot (n_i - j_s + j_{sa} - j_i - s - j_{sa})!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n - 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa}^{ik} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa} \leq j_{sa}^{ik} < j_i + j_{sa} - s \wedge j_{sa}^{ik} - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > 0 \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D - n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \vee$$

$$fz S_{j_s, j_{ik}, j_{sa}, j_i}^{iss} = \sum_{k=1} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{( )}$$

$$\sum_{j_{ik} = j_{sa}^{ik} + l_{ik} - l_{sa}} \sum_{(j_{sa} = l_i + n + j_{sa} - D - s)}^{(n + j_{sa} - s)} \sum_{j_i = j_{sa}^{ik} + l_i - l_{sa}}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{( )} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3} \frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_{sa} \leq j_{sa}^{ik}$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > j_{ik} \wedge l_i + j_{sa} - s > l_s \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_2 + k_3 \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3 \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$



$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{l_s} = \sum_{k=1} \sum_{(j_s = j_{ik} + l_s - l_{ik})}^{( )}$$

$$\sum_{j_{ik} = j_{sa} + j_{sa}^{ik} - j_{sa}}^{(n + j_{sa} - s)} \sum_{(j_{sa} = l_i + n + j_{sa} - D - s)} \sum_{j_i = j_{sa} + s - j_{sa}}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_i = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_i + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)}^{( )} \sum_{n_s = n_{sa} + j_{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz_{j_s}^{iss} j_{ik} j_{sa}^i = \sum_{k=1}^{\lfloor \frac{n}{j_s} \rfloor} \binom{n}{j_s k} \binom{n-j_s k}{j_{sa}^i - j_{ik} k}$$

$$\sum_{j_{ik}=j_{sa}^i+k}^{\lfloor \frac{n}{j_s} \rfloor} \sum_{l_{sa}=(j_{sa}^i-j_{ik}k)}^{\lfloor \frac{n+j_{sa}-s}{j_s} \rfloor} \sum_{k=s-j_{sa}}^{\lfloor \frac{n}{j_s} \rfloor}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s = n + 1 \wedge$$

$$2 \leq j_s \leq j_{sa}^{ik} - j_{sa}^i + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa}^i + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{sa}^{ik} \leq j_{sa}^i \leq j_i + j_{sa} - s \wedge j_{sa}^i + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i}^{ISS} = \sum_{k=1}^{( )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{( )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(n+j_{sa}-s)} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)}^{(n+j_{sa}-s)} \sum_{j_i=j^{sa}+l_i-1}^{(n+j_{sa}-s)}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-k_1}^{(n_i-j_s+1)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_1)}^{( )} \sum_{(n_{sa}=n_{sa}+j^{sa}-j_i)}^{( )}$$

$$\frac{(n_i + j_s - k_1 - s - j_{sa}^s)!}{(n_i - n + l_i)! \cdot (n_{is} + j_{sa} - j_{sa}^s)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > D - n \wedge I = k > 0 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} + j_i + j_{sa} - s \wedge j^{sa} + j_{sa} - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_{sa} + j_{sa}^{ik} - j_{sa} \wedge l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$((D - n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 7 \wedge s = s + k \wedge$

$k_z: z = 3 \wedge k_z = k_1 + k_2 + k_3) \vee$

$D > n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k \wedge$

$k_z: z = 2 \wedge k = k_2 + k_3) \vee$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \vee$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{ISS} = \sum_{k=1} \sum_{(j_s = j_{ik} + l_s - l_{ik})}^{( )}$$

$$\sum_{j_{ik} = j_{sa} + l_{ik} - l_{sa}} \sum_{(j_{sa} = l_{sa} + n - D)}^{(n + j_{sa} - s)} \sum_{j_i = j_{sa} + l_i - l_{sa}}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{( )} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3} (n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)! / ((n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!)$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} - s - j_{sa} \leq j_s < n$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - j_{ik} \wedge l_i + j_{sa} - s = l_s \wedge$

$((D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j^i\} \wedge$

$s \geq 7 \wedge s = s + k \wedge$

$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k \wedge$

$k_z: z = 2 \wedge k = k_2 + k_3 \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k \wedge$

$k_z: z = 2 \wedge k = k_1 + k_3 \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k \wedge$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{l_s} = \sum_{k=1}^{\binom{()}{}} \sum_{(j_s = j_{ik} + l_s - l_{ik})}^{\binom{()}{}}$$

$$\sum_{j_{ik} = j_{sa} + j_{sa}^{ik} - j_{sa}}^{\binom{()}{}}$$

$$\sum_{(j_{sa} = l_{sa} + n - D)}^{\binom{()}{}}$$

$$\sum_{j_i = j_{sa} + l_i - l_{sa}}^{\binom{()}{}}$$

$$\sum_{n_i = n + \mathbb{k}}^{\binom{()}{}}$$

$$\sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{\binom{()}{}}$$

$$\sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}^{\binom{()}{}}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)}^{\binom{()}{}}$$

$$\sum_{n_s = n_{sa} + j_{sa} - j_i - \mathbb{k}_3}^{\binom{()}{}}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!} \cdot$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$



$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz_{j_s}^{i s s} j_{i k} j_{s a}^{i s} = \sum_{k=1}^{\lfloor \frac{n}{2} \rfloor} \sum_{j_i = j_{i k} - k + 1}^{\lfloor \frac{n}{2} \rfloor} \sum_{j_{i k} = j_i + k}^{\lfloor \frac{n}{2} \rfloor} \sum_{j_{s a} = l_{s a} + n}^{\lfloor \frac{n}{2} \rfloor} \sum_{l_{i k} = l_{s a} - n}^{\lfloor \frac{n}{2} \rfloor} \sum_{n_i = n + \mathbb{k}}^{\lfloor \frac{n}{2} \rfloor} \sum_{n_{i s} = n - j_s + 1}^{\lfloor \frac{n}{2} \rfloor} \sum_{n_{i k} = n_{i s} + j_s - j_{i k} - \mathbb{k}_1}^{\lfloor \frac{n}{2} \rfloor} \sum_{(n_{s a} = n_{i k} + j_{i k} - j_{s a} - \mathbb{k}_2)}^{\lfloor \frac{n}{2} \rfloor} \sum_{n_s = n_{s a} + j_{s a} - j_i - \mathbb{k}_3}^{\lfloor \frac{n}{2} \rfloor} \frac{(n + j_s + j_{s a}^{i k} - j_{i k} - s - I - j_{s a}^s)!}{(n_i - I)! \cdot (n + j_s + j_{s a}^{i k} - j_{i k} - s - j_{s a}^s)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$2 \leq j_s \leq j_{i k} - j_{s a}^{i k} + 1 \wedge j_s + j_{s a}^{i k} - 1 \leq j_{i k} \leq j^{s a} + j_{s a}^{i k} - j_{s a} \wedge$$

$$j_{s a}^{i k} \leq j^{s a} \leq j_i + j_{s a} - s \wedge j^{s a} + s - j_{s a} \leq j_i \leq n \wedge$$

$$l_{i k} - j_{s a}^{i k} + 1 > l_s \wedge l_{s a} + j_{s a}^{i k} - j_{s a} > l_{i k} \wedge l_i + j_{s a} - s = l_{s a} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \Rightarrow$$

$$f_{z, s}^{ISS} j_{ik, j^{sa}, j_i} = \sum_{k=1}^{( )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{( )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(n+j_{sa}-s)} \sum_{(j^{sa}=l_{sa}+n-D)}^{(n+j_{sa}-s)} \sum_{j_i=j^{sa}+l_i-j_{ik}}^{( )}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-k_1}^{( )}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_1)}^{( )} \sum_{n_{sa}=n_{sa}+j^{sa}-j_i}^{( )}$$

$$\frac{(n_i + j_s - k_1 - s - j_{sa}^s)!}{(n_i - n + l_i)! \cdot (n_{is} + j_{sa} - k_1 - j_{sa}^s)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n \wedge I = k > 0 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \wedge j_i + j_{sa} - s \wedge j^{sa} - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_{sa} + j_{sa}^{ik} - j_{sa} \wedge l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D - n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 5 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 5 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \dots) \vee$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 5 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 1 \wedge \dots = \mathbb{k}_3)) \vee$

$$f_z S_{j_s}^{ISS} j_{ik}, j_{sa}, j_i = \sum_{k=1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )}$$

$$\sum_{j_{ik}=j_{sa}+l_{ik}-l_{sa}} \sum_{(j_{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik})}^{(n+j_{sa}-s)} \sum_{j_i=j_{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{( )} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3} (n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)! / ((n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!)$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_s)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_{sa} \leq j_{sa}^{ik} + j_{sa} - j_{ik} \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - j_{ik} \wedge l_i + j_{sa} - s = l_s \wedge$

$((D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j^i\} \wedge$

$s \geq 7 \wedge s = s + k \wedge$

$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k \wedge$

$k_z: z = 3 \wedge k = k_2 + k_3 \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k \wedge$

$k_z: z = 2 \wedge k = k_1 + k_3 \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k \wedge$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{l_s} = \sum_{k=1}^{(\ )} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_i = j_{sa}^{ik} + l_{ik} - l_{sa}}^{(n + j_{sa} - s)} \sum_{(j_{sa} = l_{ik} + n + j_{sa} - D - j_{sa}^{ik})} \sum_{j_i = j_{sa}^{ik} + l_i - l_{sa}}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)}^{(\ )} \sum_{n_s = n_{sa} + j_{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$



$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz \sum_{j_s, j_{ik}, j_{sa}, j_i}^{ISS} \sum_{\mathbb{k}} \sum_{(j_s = j_{ik} + l_s - l_{ik})}$$

$$\sum_{j_{ik} = j_{sa} + l_{ik} - l_{sa}} \sum_{(l_s = l_s + n + j_{sa})} \sum_{(D-1)} \sum_{j_i = j_{sa} + l_i - l_{sa}}$$

$$\sum_{n_i} \sum_{\mathbb{k}} \sum_{(n_{is} = n + j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2} \sum_{n_s = n_{sa} + j_{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq l_s - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i}^{lss} = \sum_{k=1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{n+j_{sa}^{ik}-s} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{( )} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{( )}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}-j_s-l_{ik}}^{(n_i-j_s+1)}$$

$$\sum_{(n_{sa}=n_{ik}-j_s+l_{sa})}^{( )} \sum_{n_s=n+\mathbb{k}-j_s+l_{sa}-j_i-\mathbb{k}_3}^{( )}$$

$$\frac{(n_i + j_{sa}^{ik} - s - 1)!}{(n_i - n - l)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} - j_{sa} \leq j_i - j_{sa} - s - j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$

$((D \geq n < n \wedge I = \mathbb{k} > 0) \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_1, j_{sa}^{l-2}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^l\} \wedge$

$s \geq 7 \wedge s = s + \mathbb{k} \wedge$

$(s = s + \mathbb{k} \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^l\} \wedge$

$s \geq 6 \wedge s = s + \mathbb{k} \wedge$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\}$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i}^{ISS} = \sum_{k=1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{n+j_{sa}^{ik}-s} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{( )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_2} \frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!} \cdot \frac{(l_s - 1)!}{(l_s - 1)! \cdot (l_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - l_i - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} - j_{sa}^{ik} - j_{sa}$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j_i + s - j_{sa} \leq j_i < n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_i > l_{ik} \wedge l_{sa} + j_{sa} - s = l_s \wedge$

$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 7 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_2: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$

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$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_2: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_2: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$

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$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

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$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

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$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{ISS} = \sum_{k=1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{n+j_{sa}^{ik}-s} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{( )} \sum_{j_i=j_{sa}^{ik}+l_i-l_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-k_2)}^{( )} \sum_{n_s=n_{sa}+j_{sa}^{ik}-j_i-k_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

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$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$\begin{aligned} S_{j_s, j_{ik}}^{ISS} &= \sum_{k=1}^{(\cdot)} (j_s = j_{ik} - j_{sa}^{ik} + 1) \\ &= \sum_{k=1}^{(\cdot)} \sum_{j_i = j_{sa}^{sa} + l_i - l_{sa}}^{n + j_{sa}^{ik} - s} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}^{n + \mathbb{k} - j_s + 1} \sum_{n_s = n_{sa} + j_{sa}^{sa} - j_i - \mathbb{k}_3}^{(n_{is} = n + \mathbb{k} - j_s + 1)} \\ &= \frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \end{aligned}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$



$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

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$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

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$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

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$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{iSS} = \sum_{k=1} \sum_{(j_s=j_{ik}+l_s-l_i)}^{( )}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{n+j_{sa}^{ik}-s} \sum_{(j_{sa}=j_{ik}+j_{sa}^{ik}-j_s)}^{( )}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_s-l_{ik}-1)}^{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_s-l_{ik}-1)} \sum_{(n_{sa}+j_{sa}^{ik}-j_i-l_{ik})}^{(n_{sa}+j_{sa}^{ik}-j_i-l_{ik})}$$

$$\frac{(n_i+j_s+j_{sa}^{ik}-j_{ik}-s-I-j_{sa}^s)!}{(n_i-n_{ik})! \cdot (n_i+j_{sa}^{ik}-j_{ik}-s-j_{sa}^s)!}$$

$$\frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!}$$

$$\frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!}$$

$$D \geq n < n \wedge l_s = D - n - 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + j_s + j_{sa} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq j_{sa} + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - l_{ik} + 1 > l_s - j_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_1, j_{sa}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

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$$s \geq 5 \wedge s = s + k \wedge$$

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$$s \geq 5 \wedge s = s + k \wedge$$

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$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3)) \Rightarrow$$

$$fz S_{j_s, j_{ik}, j_{sa}, j_i}^{ISS} = \sum_{k=1} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{( )}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{n+j_{sa}^{ik}-s} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{n_s=n_{sa}+j_s-j_i-l_{k_3}}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - j_i - l_{k_3})!}{(n_i - n - l)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_i - l_{k_3})!} \cdot \frac{(l_s - 2)!}{(l_s - j_i - 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{ik} \leq j_i + j_{sa}^{ik} \wedge j_{ik} \leq j_i + j_{sa}^{ik} - j_i \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + j_{sa} - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{ik} > l_{ik} \wedge l_{sa} + j_{sa} - s = l_{sa} \wedge$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, l_{k_2}, j_{sa}, \dots, l_{k_3}, j_{sa}^i\}$$

$$s \geq 6 \wedge s = s + l_k \wedge$$

$$l_{k_z}: z = 2 \wedge l_k = l_{k_1} + l_{k_2} + l_{k_3}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, l_{k_2}, j_{sa}, \dots, l_{k_3}, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + l_k \wedge$$

$$l_{k_z}: z = 2 \wedge l_k = l_{k_2} + l_{k_3}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, l_{k_2}, j_{sa}, \dots, l_{k_3}, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + l_k \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\}$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \vee$$

$$fz S_{j_s, j_{ik}, j_{sa}, j_i}^{iss} = \sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{( )}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{n+j_{sa}^{ik}-s} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{( )} \sum_{j_i=j_{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_i=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{( )} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - l_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\}$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$f_z S_{j_s, j_{ik}}^{iss} j_i = \sum_{k=1}^{()} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()} \\ \sum_{j_{ik}=l_{sa}+n+}^{j_{sa}^{ik}-s} \sum_{i-D-j_{sa}}^{()} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})} \sum_{j_i=j^{sa}+l_i-l_{sa}} \\ \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \\ \frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!} \cdot \\ \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\ \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$



$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{ISS} = \sum_{j_s=j_{ik}+j_{sa}-l_{ik}}^{( )} \sum_{j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa}}^{n+j_{sa}^{ik}-s} \sum_{j_{sa}=j_{sa}+l_i-l_{sa}}^{( )} \sum_{n_i=n+\mathbb{k}}^{( )} \sum_{j_{sa}+j_{sa}^{ik}-j_{ik}-s-I-j_{sa}^s}^{( )} \sum_{n_s=n_{sa}+j_{sa}^{ik}-j_i-\mathbb{k}_3}^{( )} \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - \dots + 1 \wedge$$

$$2 \leq j_{ik} - j_{sa}^{ik} \leq j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$j_{sa}^{ik} - 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\}$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i}^{iss} = \sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{( )}$$

$$\sum_{j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa}}^{n+j_{sa}^{ik}-s} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{( )} \sum_{j_i=j^{sa}+l_i}^{( )}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{ik}-k_1}^{( )}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{( )} \sum_{(n_{sa}+j^{sa}-j_i)}^{( )}$$

$$\frac{(n_i + j_s + \dots - s - j_{sa}^s)!}{(n_i - n - l_i)! \cdot (n_{is} + j_{sa}^{sa} - j_{sa}^s)!}$$

$$(l_s - 2)!$$

$$(l_s - j_s)! \cdot (j_s - 2)!$$

$$(D - l_i)!$$

$$(D - j_i - n - l_i)! \cdot (n - j_i)!$$

$$D \geq n < n \wedge l_s > D - n + \dots \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{sa} - 1 \leq j_{ik} \leq \dots + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{sa} - j_{sa}^{ik} \leq j^{sa} + j_i + j_{sa} - s \wedge j^{sa} + j_{sa} - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > \dots \wedge l_{sa} + j_{sa}^{sa} - j_{sa}^{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D - n < n \wedge I = \dots > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_s, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq \dots = s + k_1 \wedge$$

$$k_z: z = 3 \wedge \dots = k_1 + k_2 + k_3) \vee$$

$$\dots \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \vee$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{ISS} = \sum_{k=1}^{( )} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{( )}$$

$$\sum_{j_{ik} = l_{sa} + n + j_{sa}^{ik} - D - j_{sa}}^{n + j_{sa}^{ik} - s} \sum_{(j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}^{( )} \sum_{j_i = j_{sa}^{ik} + l_i - l_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{i_s}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{i_k}=n_{i_s}+j_s-j_{i_k}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{i_k}+j_{i_k}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_2}$$

$$\frac{(n_i + j_s + j_{sa}^{i_k} - j_{i_k} - s - I - j_{sa}^s)!}{(n_i - n - I)! \cdot (n + j_s + j_{sa}^{i_k} - j_{i_k} - s - j_{sa}^s)!}$$

$$\frac{(l_s - 1)!}{(l_s - 1)! \cdot (l_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - l_i - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq j_s \leq j_{i_k} - j_{sa}^{i_k} + 1 \wedge j_s + j_{sa}^{i_k} - 1 \leq j_{i_k} \leq j^{sa} - j_{sa}^{i_k} - j_{sa}$

$j_{i_k} + j_{sa} - j_{sa}^{i_k} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j_i + s - j_{sa} \leq j_{i_k} < n \wedge$

$l_{i_k} - j_{sa}^{i_k} + 1 = l_s \wedge l_{sa} + j_{sa}^{i_k} - j_{sa} = l_{i_k} \wedge l_{sa} + j_{sa} - s = l_s \wedge$

$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{i_k}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 7 \wedge s = s + \mathbb{k}$

$\mathbb{k}_2: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{i_k}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_2: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}, \dots, \mathbb{k}_1, j_{sa}^{i_k}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_2: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3)) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{ISS} = \sum_{k=1} \sum_{(j_s = j_{ik} + l_s - l_{ik})}^{( )}$$

$$\sum_{j_{ik} = l_{ik} + n - D}^{n + j_{sa}^{ik} - s} \sum_{(j_{sa} = j_{ik} + l_{sa} - l_{ik})}^{( )} \sum_{j_i = j_{sa} + l_i - l_{sa}}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - k_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - k_2)}^{( )} \sum_{n_s = n_{sa} + j_{sa} - j_i - k_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$S_{j_s, j_{ik}}^{ISS} = \sum_{k=1}^{\binom{()}{j_s=j_{ik}-j_{sa}^{ik}+1}}$$

$$\sum_{j_{ik}=n+D-j_{sa}^{ik}+1}^{n+j_{sa}^{ik}-s} \sum_{k+l_{sa}-l_{ik}}^{\binom{()}{j_{sa}^{ik}+l_{sa}-l_{ik}}} \sum_{j_i=j_{sa}^{ik}+l_i-l_{sa}}$$

$$\sum_{n+l_{sa}-(j_s+1)}^n \sum_{n+l_{sa}-(j_s+1)}^n \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-\mathbb{k}_2)}^{\binom{()}{n_s=n_{sa}+j_{sa}^{ik}-j_i-\mathbb{k}_3}}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$$



$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

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$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{iSS} = \sum_{k=1}^{\binom{()}{j_s=j_{ik}+l_s-l_i}} \sum_{j_{ik}=l_s+n+j_{sa}^{ik}-D-1}^{n+j_{sa}^{ik}-s} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{sa}=n_{ik}+j_{sa}-j_{sa}^{ik}-\mathbb{k}_2)}^{(n_{sa}=n_{ik}+j_{sa}-j_{sa}^{ik}-\mathbb{k}_2)} \sum_{(n_{sa}=n_{ik}+j_{sa}-j_{sa}^{ik}-\mathbb{k}_2)}^{(n_{sa}=n_{ik}+j_{sa}-j_{sa}^{ik}-\mathbb{k}_2)} \frac{(n_{sa}+j_s+j_{sa}^{ik}-j_{ik}-s-I-j_{sa}^s)!}{(n_{sa}-n_{ik})! \cdot (n_{sa}+j_{sa}^{ik}-j_{ik}-s-j_{sa}^s)!} \cdot \frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!} \cdot \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!}$$

$$D \geq n < n \wedge l_s = D - n - 1 \wedge$$

$$2 \leq j_{ik} - j_{sa}^{ik} + j_s + j_{sa} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq j_{sa} + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - \mathbb{k} + 1 = l_s - j_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_1, j_{sa}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \Rightarrow$$

$$fz^{siss} j_s j_{ik} j_{sa} j_i = \sum_{k=1} \sum_{(j_s=l_i+n-D-s+1)}^{(n-s+1)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s} \sum_{\binom{()}{j^{sa}=j_{ik}+l_{sa}-l_{ik}}} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+l_k}^n \sum_{\binom{()}{n_{is}=n+l_k-j_s+1}}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{ik}}$$

$$\sum_{\binom{()}{n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2}}} \sum_{\binom{()}{n_s=n_{sa}+l_s-j_i-l_{k_3}}}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - j_s - l_s)!}{(n_i - n - l)! \cdot (n + j_s - j_{sa}^{ik} - j_{ik} - j_s)! \cdot (j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - n - l_i)!}{(D + j_s - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{ik} - j_{sa}^{ik} - 1 < j_{ik} \leq j_{sa}^{ik} + j_{sa}^{ik} - j_{ik} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_{ik} + j_{sa} - s \wedge j^{sa} - j_{sa} - s \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_{sa} + j_{sa} - s > l_{sa} \wedge$$

$$((D \geq n < n \wedge l_s > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, l_{k_2}, j_{sa}, \dots, l_{k_3}, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + l_k \wedge$$

$$l_{k_2}: z = 2 \wedge l_k = l_{k_1} + l_{k_2} + l_{k_3}) \vee$$

$$(D \geq n < n \wedge l_s = l_k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, l_{k_2}, j_{sa}, \dots, l_{k_3}, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + l_k \wedge$$

$$l_{k_2}: z = 2 \wedge l_k = l_{k_2} + l_{k_3}) \vee$$

$$(D \geq n < n \wedge l_s = l_k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, l_{k_2}, j_{sa}, \dots, l_{k_3}, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + l_k \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\}$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \vee$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{iSS} = \sum_{k=1}^{(n-s+1)} \sum_{(j_s=l_i+n-D-s+1)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s}^{()} \sum_{(j_{sa}=j_{ik}+l_{sa}-l_{ik})}^{()} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - l_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\}) \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

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$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

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$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

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$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}}^{i s s} = \sum_{k=1}^{(n-s+1)} \sum_{(j_s=l_i+n-D-s+1)}^{(n-s+1)}$$

$$\sum_{j_{ik}+l_{ik}-l_s}^{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j_{sa}+l_i-l_{sa}}^{( )}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(n_i-j_s+1)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-\mathbb{k}_2)}^{( )} \sum_{n_s=n_{sa}+j_{sa}^{ik}-j_i-\mathbb{k}_3}^{( )}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

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$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$



$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 5 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$

$$fz S_{j_s, j_{ik}, j_{sa}, j_i}^{iSS} = \sum_{k=1}^{(n-s+1)} \sum_{(j_s=l_i, \dots, D-s+1)}^{(n-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(j_{sa}=j_{ik}-l_{ik})} \sum_{j_i=j_{sa}+j_{sa}^{ik}-j_{sa}}^{(j_{sa}=j_i-l_{ik})}$$

$$\sum_{n_i=l_{ik}}^n \sum_{(n_{is}=n_{is}+j_s+1)}^{(n_{is}=j_s+1)} \sum_{n_{ik}}^{(n_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(j_{ik}=l_{ik})}^{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})}$$

$$\frac{(n_{is}+j_{sa}^{ik}-j_{sa}-l_{ik}-s-I-j_{sa}^s)!}{(n_{is}+j_{sa}^{ik}-j_{sa}-I)! \cdot (n_{ik}+j_s+j_{sa}^{ik}-j_{ik}-s-j_{sa}^s)!}$$

$$\frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!}$$

$$\frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!}$$

$D \geq n < n \wedge l_s > D > n + 1 \wedge$

$l_s \leq j_s \leq j_{sa} - j_{sa}^{ik} + 1 \wedge s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} = j_i + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + j_{sa} = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 7 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{iSS} = \sum_{k=1} \sum_{(j_s=l_i+n-D-s+1)}^{(n-s+1)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s} \sum_{\binom{()}{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+l_k}^n \sum_{\binom{()}{n_{is}=n+l_k-j_s+1}}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{\binom{()}{n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2}}} \sum_{n_s=n_{sa}+j_i-j_{l_{k_3}}}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - j_{sa} - l_{k_2} - j_{sa} - j_i - l_{k_3})!}{(n_i - n - l)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - j_{sa} - l_{k_2} - j_{sa} - j_i - l_{k_3})!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s - 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_s - j_s - 1)!}{(D + j_s - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{ik}^{ik} \leq j_{ik} \leq j_s + j_{sa}^{ik} - j_{sa}^{ik} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_{ik} + j_{sa} - s \wedge j^{sa} - j_{sa} \leq j_l \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa}^{ik} = l_{ik} \wedge l_{sa} + j_{sa} - s > l_{sa} \wedge$

$((D > n < n \wedge l_s > 0 \wedge$

$s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, l_{k_2}, j_{sa}, \dots, l_{k_3}, j_{sa}^i\}$

$s \geq 6 \wedge s = s + k$

$l_{k_2}: z = 2 \wedge k = l_{k_1} + l_{k_2} + l_{k_3}) \vee$

$(D \geq n < n \wedge l_s = 0 \wedge$

$s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, l_{k_2}, j_{sa}, \dots, l_{k_3}, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k$

$l_{k_2}: z = 2 \wedge k = l_{k_2} + l_{k_3}) \vee$

$(D \geq n < n \wedge l_s = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, j_{sa}, \dots, l_{k_3}, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\}$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \vee$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{iSS} = \sum_{k=1}^{(n-s+1)} \sum_{(j_s=l_i+n-D-s+1)}^{(n-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(n-s+1)} \sum_{(j_{sa}=j_{ik}+l_{sa}-l_{ik})}^{(n-s+1)} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(n-s+1)} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - l_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\}) \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}}^{i s s} = \sum_{k=1}^{(n-s+1)} \sum_{(j_s = l_i + n - D - s + 1)}^{(n-s+1)}$$

$$\sum_{j_{ik}}^{( )} \sum_{+j_{sa}^{ik}-1}^{( )} \sum_{(j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}^{( )} \sum_{j_i = j_{sa} + l_i - l_{s1}}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)}^{( )} \sum_{n_s = n_{sa} + j_{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - \mathbf{n} - I)! \cdot (\mathbf{n} + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

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$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{iss} = \sum_{k=1}^{\sum_{j_s=l_{sa}+l_s}^{(n-s+1)} (D-j_{sa}+1)} \sum_{j_{ik}=j_s+l_{ik}-l_s}^{(n-s+1)} (j_{sa}=j_{ik}-l_{ik}) \sum_{j_i=j_{sa}+l_i}^{(n-s+1)} (n_i=j_s+l_s) \sum_{n_{ik}=n_{sa}+j_{sa}-j_i}^{(n-s+1)} (n_{ik}=n_{sa}+j_{sa}-j_i-l_{ik}) \sum_{n_s=n_{sa}+j_{sa}-j_i-l_{ik_3}}^{(n-s+1)} \frac{(n_i=j_s+l_s+j_{sa}-j_{ik}-s-I-j_{sa}^s)!}{(n_i+l_s-I)! \cdot (n_s+l_s+j_{sa}-j_{ik}-s-j_{sa}^s)!} \cdot \frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!} \cdot \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!}$$

$$D \geq n < n \wedge l_s > l_s + 1 \wedge$$

$$j_s \leq j_{sa} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} = j_i + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$



$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

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$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

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$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3)) \Rightarrow$$

$$fz_{j_s, j_{ik}, j_{sa}, j_i}^{lss} = \sum_{k=1}^{(n-s+1)} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(n-s+1)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s} \sum_{\binom{()}{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+l_k}^n \sum_{\binom{()}{n_{is}=n+l_k-j_s+1}}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{\binom{()}{n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2}}} \sum_{n_s=n_{sa}+j_i-l_{k_3}}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - j_{sa}^{ik} - j_{sa}^{ik})!}{(n_i - n - l)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - j_{sa}^{ik})!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_s)!}{(D + j_s - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{ik}^{ik} \leq j_{ik} \leq j_s + j_{sa}^{ik} - j_{sa}^{ik} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_{ik} + j_{sa} - s \wedge j^{sa} - j_{sa} \leq j_l \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa}^{ik} = l_{ik} \wedge l_{sa} + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, l_{k_2}, j_{sa}, \dots, l_{k_3}, j_{sa}^i\}$$

$$s \geq 6 \wedge s = s + k$$

$$k_2: z = 2 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, l_{k_2}, j_{sa}, \dots, l_{k_3}, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_2: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, l_{k_2}, j_{sa}, \dots, l_{k_3}, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\}$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \vee$$

$$fz S_{j_s, j_{ik}, j_{sa}, j_i}^{ISS} = \sum_{k=1}^{(n-s+1)} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j_{sa}=j_{ik}+l_{sa}-l_{ik})} \sum_{j_i=j_{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{( )} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - l_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\}$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$\sum_{j_s=1}^{S_{j_s}^{ISS}} \sum_{j_{ik}, j_{sa}, j_i}^{(n-s+1)} \sum_{k=1}^{(j_s=l_{sa}+n-D-j_{sa}+1)}$$

$$\sum_{j_{ik}+j_{sa}^{ik}-1}^{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j_{sa}^{ik}+l_i-l_{sa}}^{( )}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(n_i-j_s+1)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-\mathbb{k}_2)}^{( )} \sum_{n_s=n_{sa}+j_{sa}^{ik}-j_i-\mathbb{k}_3}^{( )}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

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$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa}^{ik} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

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$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 5 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$

$$fz S_{j_s, j_{ik}, j_{sa}, j_i}^{iSS} = \sum_{k=1}^{(n-s+1)} \sum_{(j_s=l_{ik}+n-j_{sa}^{ik}+1)}^{(n-s+1)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s}^{(j_{sa}=j_{ik}-l_{ik})} \sum_{j_i=j_{sa}+l_{ik}}^{(j_s+1)}$$

$$n_i^{\mathbb{k}} (n_{is}=n_{sa}+j_s+1) n_{ik}^{j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-l_{sa}-\mathbb{k}_2)}^{(j_s+1)} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}^{(j_s+1)}$$

$$\frac{(n_i^{j_{ik}+j_{sa}^{ik}} (j_{ik}-s-I-j_{sa}^s)!) }{(n_i^{j_{sa}-I})! (j_{ik}+j_s+j_{sa}^{ik}-j_{ik}-s-j_{sa}^s)!}$$

$$\frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!}$$

$$\frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!}$$

$D \geq n < n \wedge l_s > D > n + 1 \wedge$

$j_s \leq j_{sa} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} = j_i + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + j_{sa} > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 7 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z S_{j_s, j_{ik} j_{sa}, j_i}^{iSS} = \sum_{k=1}^{(n-s+1)} \sum_{(j_s = l_{ik} + n - D - j_{sa}^{ik} + 1)}^{(n-s+1)}$$



$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{\binom{()}{j^{sa}=j_{ik}+l_{sa}-l_{ik}}} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{\binom{()}{n_{is}=n+\mathbb{k}-j_s+1}}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{\binom{()}{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}} \sum_{\binom{()}{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - j_i - j_s)!}{(n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - j_i - j_s)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s - 1)! \cdot (j_s - 2)!} \cdot \frac{(D - j_s - n - l_i)!}{(D + j_s - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{ik} - j_{sa}^{ik} \leq j_{ik} \leq j_s + 1 + j_{sa}^{ik} - j_{ik} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_{ik} + j_{sa} - s \wedge j^{sa} - j_{sa} - j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - j_i = l_{ik} \wedge l_{sa} + j_{sa} - s = l_{sa} \wedge$

$((D > n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\}$

$s \geq 6 \wedge s = s + \mathbb{k}$

$\mathbb{k}_2: z = s \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_2: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + \mathbb{k} \wedge$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\}$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \vee$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{iSS} = \sum_{k=1}^{\binom{()}{j_s=j_{ik}+l_s-l_{ik}}} \sum_{j_{ik}=j_{sa}+l_{ik}-l_{sa}}^{\binom{()}{j_{sa}=j_i+l_{sa}-l_i}} \sum_{j_i=s+1}^{l_i} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_i=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{\binom{()}{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - l_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\}) \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

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$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

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$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \Rightarrow$$

$$f_z^{iSS} S_{j_s, j_{ik}}^{iSS} j_i = \sum_{k=1}^{()} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()} \sum_{k=j_{sa}+l_{ik}-l_{sa}}^{()} \sum_{(j_{sa}=j_i+l_{sa}-l_i)}^{()} \sum_{j_i=s+1}^{l_{sa}+j_{sa}-s} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j_{sa}-j_i-k_3} \frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

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$$s \geq 6 \wedge s = s + k \wedge$$

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$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{ISS} = \sum_{k=1}^{(j_s + \dots + l_s - l_{ik})} \sum_{l_i = j_{sa} - s}^{(j_s + \dots + l_s - l_{ik})} \sum_{n_i = \mathbb{k} (n_{is} = n_{is} - j_s + 1)}^{(n - j_s + 1)} \sum_{n_{ik} = j_{sa} - \mathbb{k}_1}^{(n - j_s + 1)} \sum_{(n_{sa} = n_{ik} + j_{ik} - l_{sa} - \mathbb{k}_2)}^{(n - j_s + 1)} \sum_{n_s = n_{sa} + j_{sa} - j_i - \mathbb{k}_3}^{(n - j_s + 1)} \frac{(n_i + j_{sa} - j_{ik} - s - I - j_{sa}^s)!}{(n_i + j_{sa} - I)! \cdot (j_s + j_{sa} - j_{ik} - s - j_{sa}^s)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - l_i + 1 \wedge$$

$$j_s \leq j_{sa} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} = j_i + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + j_{sa} = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

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$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

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$$s \geq 5 \wedge s = s + k \wedge$$

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$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3)) \Rightarrow$$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i}^{lss} = \sum_{k=1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}} \sum_{\binom{()}{j^{sa}=j_i+l_{sa}-l_i}} \sum_{l_{ik}+j_{sa}^{ik}-s}^{j_i=s+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{\binom{()}{n_{is}=n+l_k-j_s+1}}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{\binom{()}{n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2}}} \sum_{n_s=n_{sa}+j_i-j_{ik}-l_{k_3}}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - l_{k_2} - l_{k_3})!}{(n_i - n - l)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - l_{k_2} - l_{k_3})!}$$

$$\frac{(l_s - 2)!}{(l_s - 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_s - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{ik}^{ik} \leq j_{ik} \leq j_s + j_{sa}^{ik} - j_{ik}^{ik} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} - j_{sa} - j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{ik}^{ik} = l_{ik} \wedge l_{sa} - j_{sa} - s > l_{sa} \wedge$$

$$((D \geq n < n \wedge l_s > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, l_{k_2}, j_{sa}, \dots, l_{k_3}, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$l_{k_2}: z = 2 \wedge k = l_{k_1} + l_{k_2} + l_{k_3}) \vee$$

$$(D \geq n < n \wedge l_s = l_i > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, j_{sa}, \dots, l_{k_3}, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$l_{k_2}: z = 2 \wedge k = l_{k_2} + l_{k_3}) \vee$$

$$(D \geq n < n \wedge l_s = l_i > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, j_{sa}, \dots, l_{k_3}, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$



$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

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$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\}$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \vee$$

$$fz^i S_{j_s, j_{ik}, j_{sa}, j_i}^{iSS} = \sum_{k=1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )}$$

$$\sum_{j_{ik}=j_{sa}+l_{ik}-l_{sa}} \sum_{(j_{sa}=j_i+j_{sa}-s)}^{( )} \sum_{j_i=s+1}^{l_{ik}+j_{sa}^{ik}-s}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{( )} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

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$$D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\}$$

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$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$f_z S_{j_s, j_{ik}}^{iss} j_i = \sum_{k=1}^{(\cdot)} \sum_{(j_s = j_{ik} + l_s - l_{ik})}^{(\cdot)}$$

$$\sum_{k=j_{sa} + j_{sa}^{ik} - j_{sa}}^{(\cdot)} \sum_{(j_{sa} = j_i + l_{sa} - l_i)}^{(\cdot)} \sum_{j_i = s+1}^{l_{ik} + j_{sa}^{ik} - s}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)}^{(\cdot)} \sum_{n_s = n_{sa} + j_{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

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$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

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$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

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$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

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$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{l_{ss}} = \sum_{j_s=j_{ik}-l_{ik}}^{( )} \sum_{j_{sa}=j_i+l_{ik}-s}^{( )} \sum_{j_{ik}=j_{sa}}^{( )} \sum_{j_i=s+1}^{( )} \sum_{n_i=n+\mathbb{k}}^{( )} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}^{( )} \frac{(n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(l_s - 2)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_i \leq D - n + 1 \wedge$$

$$1 \leq j_i \leq j_{ik} - j_{sa}^{ik} \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$j_i - j_{sa}^{ik} - 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

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$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\}$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i}^{iSS} = \sum_{k=1}^{()} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()} \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{()} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{()} \sum_{j_i=s+1}^{l_s+s-1} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-k_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa})}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i} \frac{(n_i + j_s - j_{ik} - s - j^{sa})!}{(n_i - n - l)! \cdot (n_i - j_s + j^{sa} - j_{ik} - s - j^{sa})!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > 1 \wedge l_i = 0 + s - n \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa}^{ik} - j_{sa}^{ik} \leq j_i \leq j_i + j_{sa} - s - j_{sa}^{ik} + j_{sa}^{ik} - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 \leq l_{sa}^{ik} - j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$

$((D \geq n < n \wedge I = k > 0 \wedge$

$\{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}^i, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 7 \wedge s = s + k$

$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}^i, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k \wedge$

$k_z: z = 2 \wedge k = k_2 + k_3) \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \vee$$

$$f_z S_{j_{ik} j_{sa} j_i}^{iss} = \sum_{k=1}^{( )} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )}$$

$$\sum_{j_{ik}=j_{sa}+l_{ik}-l_{sa}}^{( )} \sum_{(j_{sa}=j_i+j_{sa}-s)}^{( )} \sum_{j_i=s+1}^{l_s+s-1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_i=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{( )} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3} \frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_{sa} \leq j_{ik} - j_{sa}^{ik} + 1 = l_s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - j_{ik} \wedge l_i + j_{sa} - s = l_s \wedge$

$((D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j^i\} \wedge$

$s \geq 7 \wedge s = s + k \wedge$

$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k \wedge$

$k_z: z = 2 \wedge k = k_2 + k_3 \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k \wedge$

$k_z: z = 2 \wedge k = k_1 + k_3 \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k \wedge$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z \mathcal{D}_{j_s^s, j_{ik}, j_{sa}, j_i}^{l_s} = \sum_{k=1} \sum_{(j_s = j_{ik} + l_s - l_{ik})}^{( )}$$

$$\sum_{j_{ik} = j_{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j_{sa} = j_i + l_{sa} - l_i)}^{( )} \sum_{j_i = s+1}^{l_s + s - 1}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)}^{( )} \sum_{n_s = n_{sa} + j_{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = \mathbf{s} + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = \mathbf{s} + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz_{j_s}^{i s s} j_{i k} j_{s a}^{i s} = \sum_{k=1}^{\lfloor \frac{s}{2} \rfloor} \binom{s}{j_s=j_{i k}+j_{s a}+k} \binom{l_s+s-1}{j_{i k}+j_{s a}+k} \sum_{i=s+1}^n \binom{n}{n_i=n+k} \binom{n_i-j_s+1}{n_{i s}=n_i-j_s+1} \sum_{n_{i k}=n_{i s}+j_s-j_{i k}-\mathbb{k}_1} \binom{l_s-1}{n_{i k}=n_{i s}+j_s-j_{i k}-\mathbb{k}_2} \sum_{n_s=n_{i k}+j_{i k}-j_{s a}-\mathbb{k}_2} \binom{l_s-1}{n_s=n_{i k}+j_{i k}-j_{s a}-\mathbb{k}_2} \frac{(n_i+j_s+j_{s a}^{i k}-j_{i k}-s-I-j_{s a}^s)!}{(n_i-j_s+1)! \cdot (n+j_s+j_{s a}^{i k}-j_{i k}-s-j_{s a}^s)!} \cdot \frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!} \cdot \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s \leq D + s - \mathbf{n} \wedge$$

$$1 \leq j_s \leq j_{i k} - j_{s a}^{i k} + 1 \wedge j_s + j_{s a}^{i k} - 1 \leq j_{i k} \leq j^{s a} + j_{s a}^{i k} - j_{s a} \wedge$$

$$j_s + j_{s a}^{i k} \leq j^{s a} \leq j_i + j_{s a} - s \wedge j^{s a} + s - j_{s a} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{i k} - j_{s a}^{i k} + 1 = l_s \wedge l_{s a} + j_{s a}^{i k} - j_{s a} > l_{i k} \wedge l_i + j_{s a} - s > l_{s a} \wedge$$

$$((D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{iSS} = \sum_{k=1}^{( )} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )}$$

$$\sum_{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}^{( )} \sum_{(j_{sa}=j_i+j_{sa}-s)}^{( )} \sum_{j_i=s+1}^{l_s+s-1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-l_{k1}}^{( )}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-l_{k1})}^{( )} \sum_{(n_s=n_{sa}+j_{sa}-j_i)}^{( )}$$

$$\frac{(n_i + j_s - j_{ik} - s - j_{sa}^s)!}{(n_i - n + l)! \cdot (n_{is} + j_{sa} - j_i - s - j_{sa}^s)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_i = l_s + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa}^{ik} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa} \leq j_{sa}^{ik} < j_i + j_{sa} - s \wedge j_{sa}^{ik} - j_{sa} \leq j_i \leq n \wedge$$

$$l_{k1} - j_{sa}^{ik} + 1 > 0 \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$((D - n < n \wedge I = l_k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, l_{k2}, j_{sa}, \dots, l_{k3}, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + l_k \wedge$$

$$l_{kz}: z = 3 \wedge l_k = l_{k1} + l_{k2} + l_{k3}) \vee$$

$$(D \geq n < n \wedge I = l_k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, l_{k2}, j_{sa}, \dots, l_{k3}, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + l_k \wedge$$

$$l_{kz}: z = 2 \wedge l_k = l_{k2} + l_{k3}) \vee$$

$$(D \geq n < n \wedge I = l_k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_3, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \vee$$

$$fz S_{j_s, j_{ik}, j_{sa}, j_i}^{iss} = \sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{( )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+l_{ik}-l_{sa}} \sum_{(j_{sa}=j_i+j_{sa}-s)}^{( )} \sum_{j_i=s+1}^{l_s+s-1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{( )} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3} \frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_{sa} \leq j_{ik} - j_{sa}^{ik} + 1 > l_s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > j_{ik} \wedge l_i + j_s - s = l_s \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3 \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3 \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$



$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{l_s} = \sum_{k=1}^{()} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik} = j_{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j_{sa} = j_i + l_{sa} - l_i)} \sum_{j_i = s+1}^{l_s + s - 1}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)}^{()} \sum_{n_s = n_{sa} + j_{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

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$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz \sum_{j_s, j_{ik}, j_{sa}, j_i}^{ISS} \sum_{\mathbb{k}} \sum_{(j_s = j_{ik} + l_s - l_{ik})}$$

$$\sum_{(j_{ik} = j_{sa} + l_{sa} - l_{sa})} \sum_{(j_i = j_{sa} + l_i - l_{sa})}$$

$$\sum_{n_i} \sum_{\mathbb{k}} \sum_{(n_{is} = n + j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2} \sum_{n_s = n_{sa} + j_{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$l_s \leq j_s \leq l_s - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$

$$fz^S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{()} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()} \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{(l_{sa})} \sum_{(j^{sa}=j_{sa}+1)}^{(l_{sa})} \sum_{j_i=j^{sa}+l_i-l_{s_3}}^{(l_{sa})} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{i_s}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{i_2}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{i_3}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \frac{(n_i - j_i + j_{sa}^{i_2} - j_{ik} - s - j_{sa}^s)!}{(n_i - n - l)! (n + j_s - j_{sa}^{i_2} - j_{ik} - s - j_{sa}^s)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + \dots - n \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{i_2} + 1 \wedge j_s + j_{sa}^{i_2} - 1 \leq j_i \leq j^{sa} + j_{sa}^{i_2} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{i_2} + j_{sa} \leq j_{i_2} + j_{sa} - s + j_{sa}^{i_2} + s - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{i_2} + 1 = l_s \wedge j_{sa}^{i_2} + j_{sa}^{i_2} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$

$(D \geq n < n \wedge I = \mathbb{k} > 0) \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{i_2}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 7 \wedge s = s + \mathbb{k} \wedge$

$z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{i_2}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + \mathbb{k} \wedge$

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$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

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$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \vee$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{ISS} = \sum_{k=1} \sum_{(j_s = j_{ik} + l_s - l_{ik})}^{( )}$$

$$\sum_{j_{ik} = j_{sa} + l_{ik} - l_{sa}} \sum_{(l_{sa})}^{(l_{sa})} \sum_{(j_{sa} = j_{sa} + 1)} \sum_{j_i = j_{sa} + s - j_{sa}}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{( )} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3} \frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_s)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} - s - j_{sa} \leq j_s < n -$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - j_{ik} \wedge l_i + j_s - s = l_s \wedge$

$((D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j^i\} \wedge$

$s \geq 7 \wedge s = s + k \wedge$

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$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k \wedge$

$k_z: z = 2 \wedge k = k_2 + k_3 \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k \wedge$

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$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

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$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

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$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{l_s} = \sum_{k=1}^{( )} \sum_{(j_s = j_{ik} + l_s - l_{ik})}^{( )}$$

$$\sum_{j_{ik} = j_{sa} + l_{ik} - l_{sa}}^{(l_{ik} + j_{sa}^{ik} - s)} \sum_{(j_{sa} = j_{sa} + 1)} \sum_{j_i = j_{sa} + l_i - l_{sa}}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)}^{( )} \sum_{n_s = n_{sa} + j_{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

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$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

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$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = \mathbf{s} + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = \mathbf{s} + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz_{j_s}^{iSS} j_{ik} j_{sa}^{i_s} = \sum_{k=1}^{\lfloor j_s \rfloor} \sum_{l_{ik}}^{(l_{ik} + j_{sa})} \sum_{j_{sa} + l_{ik}}^{(j_{sa} + l_{ik})} \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n_{is} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}^{(n_i - j_s + 1)} \sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)}^{(n_s = n_{sa} + j_{sa} - j_i - \mathbb{k}_3)} \frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s \leq l_i \leq D + s - \mathbf{n} \wedge$$

$$1 \leq j_s \leq j_{sa}^{ik} - j_{sa} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{ISS} = \sum_{k=1}^{()} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()} \sum_{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}^{(l_{ik}+j_{sa}^{ik}-s)} \sum_{(j_{sa}=j_{sa}+1)} \sum_{j_i=j_{sa}+l_i-1}^{()} \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-k_1}^{()} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-k_2)}^{()} \sum_{n_{sa}=n_{sa}+j_{sa}-j_i}^{()} \frac{(n_i + j_s - s - j_{sa}^s)!}{(n_i - n)! \cdot (n_{is} + j_{sa} - j_{sa}^s)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_i \leq n + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_s \leq j_i + j_{sa} - s \wedge j_{sa}^{ik} - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 \leq l_{sa} + j_{sa}^{ik} - j_{sa} \wedge l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$((D - n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$s \geq n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 5 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 5 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \dots) \vee$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

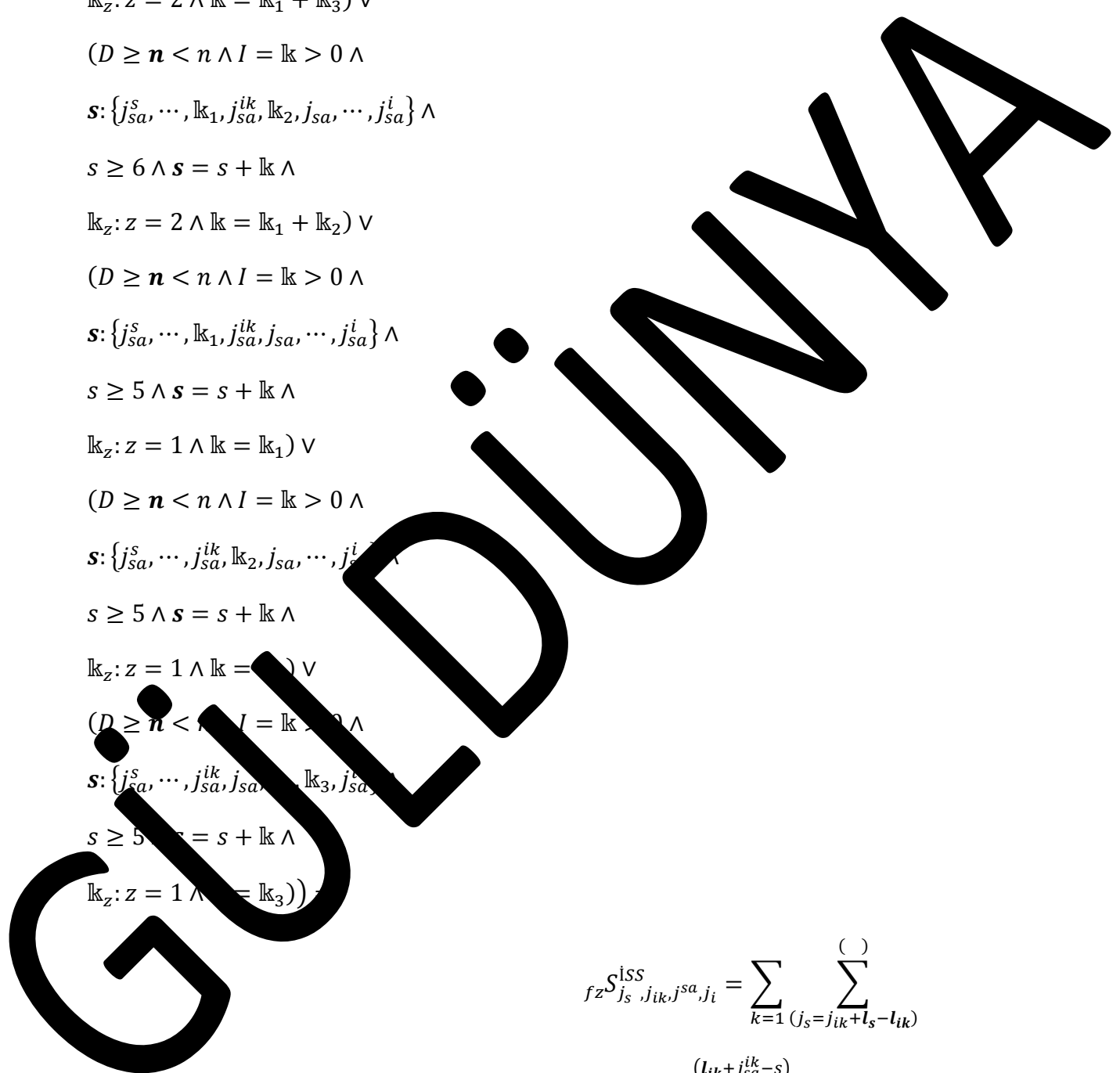
$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 5 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 1 \wedge \dots = \mathbb{k}_3)) \vee$

$$f_z S_{j_s}^{ISS} j_{ik} j_{sa} j_i = \sum_{k=1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )}$$

$$\sum_{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j_{sa}=j_{sa}+1)}^{(l_{ik}+j_{sa}^{ik}-s)} \sum_{j_i=j_{sa}+s-j_{sa}}$$



$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{i_s}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{i_k}=n_{i_s}+j_s-j_{i_k}-\mathbb{k}_1} \sum_{(n_{s_a}=n_{i_k}+j_{i_k}-j^{s_a}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{s_a}+j^{s_a}-j_i-\mathbb{k}_2} \frac{(n_i+j_s+j_{s_a}^{i_k}-j_{i_k}-s-I-j_{s_a}^s)!}{(n_i-n-I)! \cdot (n+j_s+j_{s_a}^{i_k}-j_{i_k}-s-j_{s_a}^s)!} \cdot \frac{(l_s-1)!}{(l_s-1)! \cdot (l_s-2)!} \cdot \frac{(D-l_i)!}{(D+j_i-l_i-l_i)! \cdot (n-j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{i_k} - j_{s_a}^{i_k} + 1 \wedge j_s + j_{s_a}^{i_k} - 1 \leq j_{i_k} \leq j^{s_a} - j_{s_a}^{i_k} - j_{s_a}$$

$$j_{i_k} + j_{s_a} - j_{s_a}^{i_k} \leq j^{s_a} \leq j_i + j_{s_a} - s \wedge j_i + s - j_{s_a} \leq j_{i_k} < n \wedge$$

$$l_{i_k} - j_{s_a}^{i_k} + 1 = l_s \wedge l_{s_a} + j_{s_a}^{i_k} - j_i = l_{i_k} \wedge l_{s_a} - s = l_{i_k} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{s_a}^s, \dots, \mathbb{k}_1, j_{s_a}^{i_k}, \mathbb{k}_2, j_{s_a}, \dots, \mathbb{k}_3, j_{s_a}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_2: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{s_a}^s, \dots, j_{s_a}^{i_k}, \mathbb{k}_2, j_{s_a}, \dots, \mathbb{k}_3, j_{s_a}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_2: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{s_a}, \dots, \mathbb{k}_1, j_{s_a}^{i_k}, j_{s_a}, \dots, \mathbb{k}_3, j_{s_a}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_2: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{iSS} = \sum_{k=1} \sum_{(j_s = j_{ik} + l_s - l_{ik})}^{( )}$$

$$\sum_{j_{ik} = j_{sa} + l_{ik} - l_{sa}} \sum_{(l_s + j_{sa} - 1)}^{(l_s + j_{sa} - 1)} \sum_{(j_{sa} = j_{sa} + 1)} \sum_{j_i = j_{sa} + l_i - l_{sa}}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)}^{( )} \sum_{n_s = n_{sa} + j_{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

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$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$



$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$\sum_{j_s=j_{ik}+l_s-l_{ik}}^{(l_s+j_{sa})} S_{j_s, j_{ik}}^{l_{ss}} = \sum_{k=1}^{(l_s+j_{sa})} \sum_{j_s=j_{sa}+l_{ik}-l_s}^{(l_s+j_{sa})} \sum_{j_i=j_{sa}+s-j_{sa}}^{(l_s+j_{sa})}$$

$$\sum_{n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k1}}^{(j_s+1)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-l_{k2})}^{(l_s+j_{sa})} \sum_{n_s=n_{sa}+j_{sa}-j_i-l_{k3}}^{(l_s+j_{sa})}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$s \geq 5 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$

$$fz S_{j_s}^{iss} j_{ik}, j_{sa}, j_i = \sum_{k=1} \sum_{(j_s=j_{ik}+l_s-l_{ik})} \sum_{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j_{sa}=j_{sa}+1)}^{(l_s+j_{sa}-1)} \sum_{j_i=j_{sa}+l_i-l_{sa}} \sum_{n_i=n+\mathbb{k}} \sum_{(n_{is}=n+\mathbb{k}-j_s)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}} \sum_{(n_{is}=n_{ik}+j_{ik}-l_{ik})} \sum_{n_s=n_{is}+j_s-j_{sa}} \sum_{j_i-\mathbb{k}_3} \frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - j_{sa} - I - j_{sa}^s)!}{(n_i - n - I)! \cdot (n_{is} + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - 1$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_{sa} + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} - j_{sa} - j_{sa}^{ik} \leq j^{sa} + j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$

$n_{ik} - j_{sa}^{ik} - 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$((D > n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 7 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_1, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3)) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{iss} = \sum_{k=1}^{()} \sum_{(j_s = j_{ik} - j_{sa} + 1)}^{()}$$

$$\sum_{j_{ik} = j_{sa} + l_{ik} - l_{sa}} \sum_{(j_{sa} = j_{sa} + 1)}^{(l_s + j_{sa} - 1)} \sum_{j_i = j_{sa} + l_i - l_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{i_s}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{i_s}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_2}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!} \cdot \frac{(l_s - 1)!}{(l_s - 1)! \cdot (l_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - l_i - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} - j_{sa}^{ik} - j_{sa}$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j_i + s - j_{sa} \leq j_i - n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_i > l_{ik} \wedge l_{sa} - s > l_i \wedge$

$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 7 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_2: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_2: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_2: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{iSS} = \sum_{k=1} \sum_{(j_s = j_{ik} + l_s - l_{ik})}^{( )}$$

$$\sum_{j_{ik} = j_{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(l_s = j_{sa} - 1)}^{(l_s + j_{sa} - 1)} \sum_{(j_{sa} = j_{sa} + 1)} \sum_{j_i = j_{sa} + s - j_{sa}}$$

$$\sum_{n_i = \mathbf{n} + \mathbb{k}}^n \sum_{(n_{i_s} = \mathbf{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{i_s} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)}^{( )} \sum_{n_s = n_{sa} + j_{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - \mathbf{n} - I)! \cdot (\mathbf{n} + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$\begin{aligned} & \sum_{j_s=j_{ik}-j_{sa}^{ik}+1}^{\binom{(\cdot)}{j_s, j_{ik}}} = \sum_{k=1}^{\binom{(\cdot)}{j_s, j_{ik}}} \\ & \sum_{j_s=j_{sa}+l_{ik}-l_s}^{\binom{(\cdot)}{j_s, j_{ik}}} \sum_{j_{sa}=j_{sa}+1}^{\binom{(\cdot)}{j_s, j_{ik}}} \sum_{j_i=j_{sa}+s-j_{sa}}^{\binom{(\cdot)}{j_s, j_{ik}}} \\ & \sum_{n+l_k}^n \sum_{n_{is}=n+l_k-j_s+1}^{\binom{(\cdot)}{j_s+1}} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{\binom{(\cdot)}{j_s+1}} \\ & \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{\binom{(\cdot)}{j_s+1}} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}^{\binom{(\cdot)}{j_s+1}} \\ & \frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!} \\ & \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \\ & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \end{aligned}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$



$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i}^{ISS} = \sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{( )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(l_s+j_{sa}-1)} \sum_{j_i=j_{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}$$

$$\frac{(n_i + j_s + j_{ik} - j_{ik} - I - j_{sa}^s)!}{(n_i - I)! \cdot (n_i + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s \leq j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} - j_{sa}^{ik} \leq j^{sa} + j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$j_{ik} - j_{sa}^{ik} = l_s \wedge l_{sa} \wedge j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D - n) < n \wedge l_s > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$7 + \dots = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

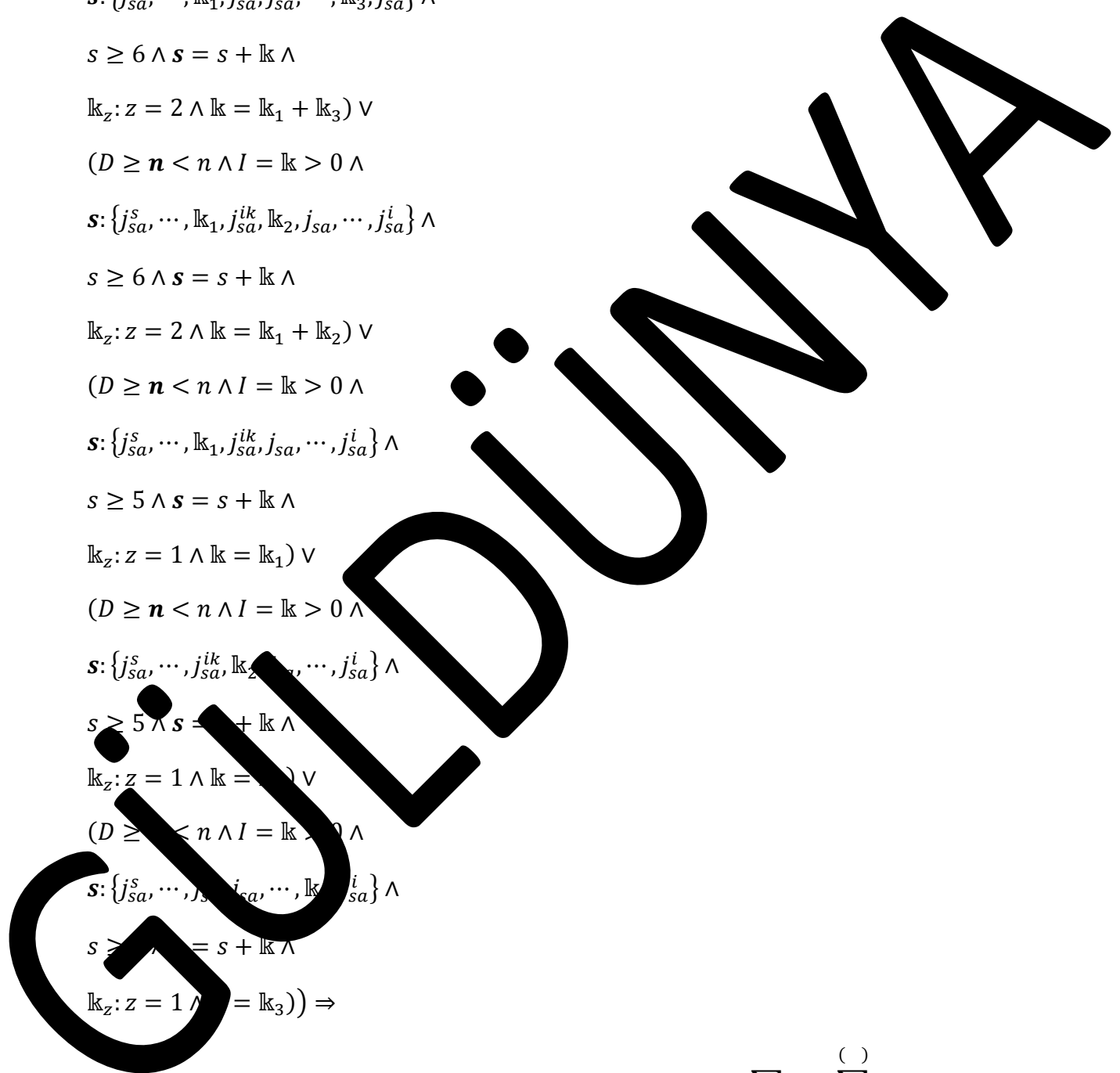
$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_1, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3)) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{iss} = \sum_{k=1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_i+j_{sa}^{ik}-s} \sum_{(j_{sa}=j_{ik}+l_{sa}-l_{ik})}^{( )} \sum_{j_i=j_{sa}^{ik}+l_i-l_{sa}}$$



$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{i_s}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{i_k}=n_{i_s}+j_s-j_{i_k}-\mathbb{k}_1} \sum_{(n_{s_a}=n_{i_k}+j_{i_k}-j^{s_a}-\mathbb{k}_2)}^{(\quad)} \sum_{n_s=n_{s_a}+j^{s_a}-j_i-\mathbb{k}_2} \frac{(n_i+j_s+j_{s_a}^{i_k}-j_{i_k}-s-I-j_{s_a}^s)!}{(n_i-n-I)! \cdot (n+j_s+j_{s_a}^{i_k}-j_{i_k}-s-j_{s_a}^s)!} \cdot \frac{(l_s-1)!}{(l_s-1)! \cdot (l_s-2)!} \cdot \frac{(D-l_i)!}{(D+j_i-l_i-l_i)! \cdot (n-j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{i_k} - j_{s_a}^{i_k} + 1 \wedge j_s + j_{s_a}^{i_k} - 1 \leq j_{i_k} \leq j^{s_a} - j_{s_a}^{i_k} - j_{s_a}$$

$$j_{i_k} + j_{s_a} - j_{s_a}^{i_k} \leq j^{s_a} \leq j_i + j_{s_a} - s \wedge j_i + s - j_{s_a} \leq j_{i_k} < n \wedge$$

$$l_{i_k} - j_{s_a}^{i_k} + 1 = l_s \wedge l_{s_a} + j_{s_a}^{i_k} - j_i = l_{i_k} \wedge l_{s_a} - s = l_{i_k} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{s_a}^s, \dots, \mathbb{k}_1, j_{s_a}^{i_k}, \mathbb{k}_2, j_{s_a}, \dots, \mathbb{k}_3, j_{s_a}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_2: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{s_a}^s, \dots, j_{s_a}^{i_k}, \mathbb{k}_2, j_{s_a}, \dots, \mathbb{k}_3, j_{s_a}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_2: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{s_a}, \dots, \mathbb{k}_1, j_{s_a}^{i_k}, j_{s_a}, \dots, \mathbb{k}_3, j_{s_a}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

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$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{iss} = \sum_{k=1} \sum_{(j_s = j_{ik} + l_s - l_{ik})}^{( )}$$

$$\sum_{j_{ik} = j_{sa}^{ik} + 1}^{l_{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j_{sa} = j_{ik} + l_{sa} - l_{ik})}^{( )} \sum_{j_i = j_{sa} + l_i - l_{sa}}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - k_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - k_2)}^{( )} \sum_{n_s = n_{sa} + j_{sa} - j_i - k_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$\begin{aligned} & \sum_{j_s=j_{ik}+l_s-l_{ik}}^{( )} S_{j_s, j_{ik}}^{ISS} = \sum_{k=1}^{( )} \sum_{j_i=j^{sa}+s-j_{sa}}^{( )} \sum_{j_{sa}=j_{ik}+1}^{l_{sa}+j_{sa}^{ik}-j_{sa}} (j_{sa})_{k+l_{sa}-l_{ik}} \\ & \sum_{n+l_{ik}}^n \sum_{n_{is}=n+l_{ik}-j_s+1}^{(j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}}^{( )} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2}}^{( )} \sum_{n_s=n_{sa}+j^{sa}-j_i-l_{k_3}}^{( )} \\ & \frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!} \cdot \\ & \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\ & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \end{aligned}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$



$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i}^{ISS} = \sum_{k=1} \sum_{(j_s=j_{ik}+l_s-l_i)}^{( )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}} \sum_{(j^{sa}=j_{ik}+l_{sa})}^{( )} \sum_{(j_i=j^{sa}+l_i-l_{sa})}^{( )}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_i-j_s+l_i+1)}^{(n_i-j_s+l_i+1)} \sum_{(n_{ik}=n_i+j_s-j_{ik}-\mathbb{k}_1)}^{( )}$$

$$\sum_{(n_{sa}=n_{ik}+j_s-j^{sa}-\mathbb{k}_3)}^{( )} \sum_{(n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}^{( )}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - n + I)! \cdot (n + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s = 1 \wedge l_i = D + s - 1 \wedge$$

$$1 \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_{sa} + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = j_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3)) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{lss} = \sum_{k=1}^{\binom{()}{j_s=j_{ik}+l_s-l_{ik}}}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{(n_s=n_{sa}+j_i-l_{k_3})}^{(j_i-l_{k_3})}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - j_s)!}{(n_i - n - l)! \cdot (n + j_s - j_{sa}^{ik} - j_{ik} - j_s)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s - 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_s - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{ik}^{ik} \leq j_{ik} \leq j_s + j_{sa}^{ik} - j_s \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i - j_{sa} - s \wedge j^{sa} - j_{sa} - j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} > l_{ik} \wedge l_{sa} - j_{sa} - s = l_{sa} \wedge$

$((D > n < n \wedge l_s > 0 \wedge$

$s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, l_{k_2}, j_{sa}, \dots, l_{k_3}, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k$

$l_{k_2}: z = 2 \wedge k = l_{k_1} + l_{k_2} + l_{k_3}) \vee$

$(D \geq n < n \wedge l_s = 1 > 0 \wedge$

$s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, l_{k_2}, j_{sa}, \dots, l_{k_3}, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k \wedge$

$l_{k_2}: z = 2 \wedge k = l_{k_2} + l_{k_3}) \vee$

$(D \geq n < n \wedge l_s = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, j_{sa}, \dots, l_{k_3}, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k \wedge$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\}$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \vee$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{iSS} = \sum_{k=1}^{l_{ik}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{( )} \sum_{j_i=j_{sa}^{ik}+l_i-l_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k1}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-l_{k2})}^{( )} \sum_{n_s=n_{sa}+j_{sa}^{ik}-j_i-l_{k3}}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - l_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\}) \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$f_z^{iSS} S_{j_s, j_{ik}}^{iSS} j_i = \sum_{k=1}^{l_i} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )}$$

$$\sum_{l_{ik}}^{l_i} \sum_{(j_{sa}^{ik}+1)}^{( )} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{( )} \sum_{(j_i=j_{sa}+s-j_{sa})}^{( )}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-\mathbb{k}_2)}^{( )} \sum_{(n_s=n_{sa}+j_{sa}^{ik}-j_i-\mathbb{k}_3)}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - \mathbf{n} - I)! \cdot (\mathbf{n} + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > 1 \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{ISS} = \sum_{k=1} \sum_{(j_s + l_s - l_{ik})}^{( )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-1} \sum_{(j_{sa}=j_{ik} - l_{ik})}^{( )} \sum_{j_i=j_{sa}+l_{ik}}$$

$$\sum_{n_i=j_{ik}}^n (n_{is}=n_{is}+1) n_{ik} n_{ik-l_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik} - l_{ik} - l_{k_2})}^{( )} \sum_{n_s=n_{sa}+j_{sa}-j_i-l_{k_3}}$$

$$\frac{(n_i + j_{sa}^{ik} + j_{sa} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + l_s - n \wedge$$

$$1 \leq j_s \leq j_{sa} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} = j_i + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + j_{sa} = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$



$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

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$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i}^{iss} = \sum_{k=1} \sum_{(j_s = j_{ik} + l_s - l_{ik})}^{( )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{(n_s=n_{sa}+j^{sa}-j_i-l_{k_3})}$$

$$\frac{(n_i+j_s+j_{sa}^{ik}-j_{ik}-s-j_{sa})!}{(n_i-n-l)! \cdot (n+j_s+j_{sa}^{ik}-j_{ik}-s-j_{sa})!} \cdot \frac{(l_s-2)!}{(l_s-j_i-1)! \cdot (j_s-2)!} \cdot \frac{(D-l_i)!}{(D+j_i+n-l_i)! \cdot (n-j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} \leq j_{ik} \leq j_{sa}^{ik} + j_{sa} - j_i \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + j_{sa} - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_{sa} + j_{sa} - s = l_{sa} \wedge$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$$

$$s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, l_{k_2}, j_{sa}, \dots, l_{k_3}, j_{sa}^i\}$$

$$s \geq 6 \wedge s = s + l_k \wedge$$

$$l_{k_z}: z = 2 \wedge l_k = l_{k_1} + l_{k_2} + l_{k_3}) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$$

$$s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, l_{k_2}, j_{sa}, \dots, l_{k_3}, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + l_k \wedge$$

$$l_{k_z}: z = 2 \wedge l_k = l_{k_2} + l_{k_3}) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$$

$$s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, l_{k_2}, j_{sa}, \dots, l_{k_3}, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + l_k \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

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$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\}$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \vee$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{iSS} = \sum_{k=1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-1} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{( )} \sum_{j_i=j_{sa}^{ik}+l_i-l_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-\mathbb{k}_2)}^{( )} \sum_{n_s=n_{sa}+j_{sa}^{ik}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

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$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\}$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

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$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

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$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$f_z S_{j_s, j_{ik}}^{ISS} j_i = \sum_{k=1}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)}$$

$$\sum_{k=j_{sa}^{ik}+1}^{l_s+j_{sa}} \sum_{(j_{sa}=j_{ik}+l_{sa}-l_{ik})}^{(\cdot)} \sum_{j_i=j_{sa}^{ik}+l_i-l_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(\cdot)} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

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$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

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$$s \geq 5 \wedge s = s + k \wedge$$

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$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{l_{ss}} = \sum_{\substack{(\cdot) \\ j_s = j_{ik} + j_{sa} - l_{ik}}} \sum_{\substack{(\cdot) \\ j_{ik} = j_{sa} - j_i + 1}} \sum_{\substack{(\cdot) \\ j_i = j_{sa} + s - j_{sa}}} \sum_{\substack{(\cdot) \\ n_i = n + \mathbb{k}_1}} \sum_{\substack{(\cdot) \\ n_i = n + \mathbb{k}_2}} \sum_{\substack{(\cdot) \\ n_s = n_{sa} + j_{sa} - j_i - \mathbb{k}_3}}$$

$$\frac{(n + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

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$$D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_i < j_{ik} - j_{sa}^{ik} - 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$j_{sa} - j_{sa}^{ik} - 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

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$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

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$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

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$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$



$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{ISS} = \sum_{k=1}^{( )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{( )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-1} \sum_{(j_{sa}=j_{ik}+l_{sa}-l_{ik})}^{( )} \sum_{j_i=j_{sa}+s-}^{( )}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{ik}-l_{k1}}^{( )}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-l_{k2})}^{( )} \sum_{(n_{sa}+j_{sa}-j_i)}^{( )}$$

$$\frac{(n_i + j_s + \dots - s - j_{sa}^s)!}{(n_i - n - l_i)! \cdot (n_{is} + j_{sa} - j_{sa}^s)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > 1 \wedge l_i \leq \dots + s - n \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq \dots + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa}^{ik} + j_i + j_{sa} - s \wedge j_{sa}^{ik} + s - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > \dots \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$((D - n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_s, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$

$\geq 6 \wedge n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \vee$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{ISS} = \sum_{k=1}^{(\ )} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )}$$

$$\sum_{j_{ik} = j_{sa}^{ik} + 1}^{l_s + j_{sa}^{ik} - 1} \sum_{(j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}^{(\ )} \sum_{j_i = j_{sa}^{ik} + l_i - l_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{i_s}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{i_k}=n_{i_s}+j_s-j_{i_k}-\mathbb{k}_1} \sum_{(n_{s_a}=n_{i_k}+j_{i_k}-j^{s_a}-\mathbb{k}_2)}^{(\quad)} \sum_{n_s=n_{s_a}+j^{s_a}-j_i-\mathbb{k}_2} \frac{(n_i + j_s + j_{s_a}^{i_k} - j_{i_k} - s - I - j_{s_a}^s)!}{(n_i - n - I)! \cdot (n + j_s + j_{s_a}^{i_k} - j_{i_k} - s - j_{s_a}^s)!} \cdot \frac{(l_s - 1)!}{(l_s - 1)! \cdot (l_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - l_i - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_{i_k} - j_{s_a}^{i_k} + 1 \wedge j_s + j_{s_a}^{i_k} - 1 \leq j_{i_k} \leq j^{s_a} - j_{s_a}^{i_k} - j_{s_a}$

$j_{i_k} + j_{s_a} - j_{s_a}^{i_k} \leq j^{s_a} \leq j_i + j_{s_a} - s \wedge j_i + s - j_{s_a} \leq j_{i_k} < n \wedge$

$l_{i_k} - j_{s_a}^{i_k} + 1 = l_s \wedge l_{s_a} + j_{s_a}^{i_k} - j_i = l_{i_k} \wedge l_{s_a} - j_{s_a} - s = l_i \wedge$

$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{s_a}^s, \dots, \mathbb{k}_1, j_{s_a}^{i_k}, \mathbb{k}_2, j_{s_a}, \dots, \mathbb{k}_3, j_{s_a}^i\} \wedge$

$s \geq 7 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_2: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{s_a}^s, \dots, j_{s_a}^{i_k}, \mathbb{k}_2, j_{s_a}, \dots, \mathbb{k}_3, j_{s_a}^i\} \wedge$

$s \geq 6 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_2: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{s_a}, \dots, \mathbb{k}_1, j_{s_a}^{i_k}, j_{s_a}, \dots, \mathbb{k}_3, j_{s_a}^i\} \wedge$

$s \geq 6 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_2: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{ISS} = \sum_{k=1}^{(l_i-s+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s} \sum_{(j_{sa}=j_{ik}+l_{sa}-l_{ik})} \sum_{j_i=j_{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{( )} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z S_{j_s, j_{sa}, j_i}^{l_s} = \sum_{k=1}^{l_s} \sum_{(j_s=2)}^{(j_s+1)} \dots$$

$$\sum_{j_{ik}+l_{ik}-l_s}^{(j_{sa}+l_{sa}-l_{ik})} \sum_{j_i=j_{sa}+l_i-l_{sa}}^{(j_s+1)}$$

$$\sum_{n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k1}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-l_{k2})}^{(j_s+1)} \sum_{n_s=n_{sa}+j_{sa}-j_i-l_{k3}}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!} \cdot$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$fz S_{j_s, j_{ik}, j_{sa}, j_i}^{ISS} = \sum_{k=1}^{(l_{sa}-j_{sa}+1)} \sum_{(j_s=2)}^{(l_{sa}-j_{sa}+1)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s}^{( )} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{( )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n_{is}+j_s-j_{sa})}^{( )}$$

$$\frac{(n_i + j_s - j_{sa} - j_{ik} - j_i - s - I - j_{sa}^s)!}{(n - I)! \cdot (n_{is} + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n \wedge l_s \leq D - n + 1$$

$$j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} - j_{sa} - j_{sa}^{ik} \leq j_i + j_{sa}^{ik} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$j_{sa}^{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} - j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n) \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$



$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\}$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$fz_{j_s, j_{ik}, j_{sa}, j_i}^{iss} = \sum_{k=1} \sum_{(j_s=2)}^{(l_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s} \sum_{(j_{sa}=j_{ik}+l_{sa}-l_{ik})}^{( )} \sum_{j_i=j_{sa}^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_2} \frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!} \cdot \frac{(l_s - 1)!}{(l_s - 1)! \cdot (l_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - l_i - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} - j_{sa}^{ik} - j_{sa}$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j_i + s - j_{sa} \leq j_{ik} < n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_i = l_{ik} \wedge l_{sa} - s > 0 \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_2: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

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$$\mathbb{k}_2: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_2: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz \sum_{j_s, j_{ik}, j_{sa}, j_i}^{ISS} = \sum_{k=1}^{(l_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s}^{( )} \sum_{(j_{sa}=j_{ik}+l_{sa}-l_{ik})} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{( )} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z S_{j_s, j_{sa}, j_i}^{l_s, j_{sa}, j_i} = \sum_{k=1}^{\mathbb{k}_k - j_{sa}^{ik} + 1} \sum_{(j_s=2)}^{(j_s=2)}$$

$$\sum_{j_{ik}=j_{sa}^{ik} - l_s}^{(j_{ik}=j_{sa}^{ik} - l_s)} \sum_{(j_s=2)}^{(j_s=2)} \sum_{j_i=j_{sa}^{ik} + l_i - l_{sa}}^{(j_i=j_{sa}^{ik} + l_i - l_{sa})}$$

$$\sum_{n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_{is}=n+l_k-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-\mathbb{k}_2)}^{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-\mathbb{k}_2)} \sum_{n_s=n_{sa}+j_{sa}^{ik}-j_i-\mathbb{k}_3}^{(n_s=n_{sa}+j_{sa}^{ik}-j_i-\mathbb{k}_3)}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!} \cdot$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$fz_{j_s, j_{ik}, j_{sa}, j_i}^{iss} = \sum_{k=1}^{(l_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}^{(l_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s}^{(j_{sa}=j_{ik}+j_{sa}-j_s)} \sum_{(j_{sa}=j_{sa}-j_{sa})}^{(j_{sa}=j_{sa}-j_{sa})}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{ik}=j_s-j_{ik}-\mathbb{k}_1)}^{(n_{ik}=j_s-j_{ik}-\mathbb{k}_1)}$$

$$\sum_{(n_{sa}=n_{ik}-j_{sa}-\mathbb{k}_2)}^{(n_{sa}=n_{ik}-j_{sa}-\mathbb{k}_2)} \sum_{(n_{sa}+j_{sa}-j_i-\mathbb{k}_3)}^{(n_{sa}+j_{sa}-j_i-\mathbb{k}_3)}$$

$$\frac{(j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n - j_s)! \cdot (n + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s = 1 \wedge l_s = D - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + j_s + j_{sa} - 1 \leq j_{ik} \leq j_{sa} + j_{sa} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{ik} \leq j_{sa} \leq j_{sa} + s \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s - j_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_1, j_{sa}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3)) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i}^{iSS} = \sum_{k=1} \sum_{(j_s=2)}^{(I_s)}$$



$$\sum_{j_{ik}=j_s+l_{ik}-l_s} \sum_{\binom{()}{j^{sa}=j_{ik}+l_{sa}-l_{ik}}} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+l_k}^n \sum_{\binom{()}{n_{is}=n+l_k-j_s+1}}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{ik}}$$

$$\sum_{\binom{()}{n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2}}} \sum_{\binom{()}{n_s=n_{sa}+j_s-j_i-l_{k_3}}}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - j_s)!}{(n_i - n - l)! \cdot (n + j_{sa}^{ik} - j_{ik} - j_s)!} \cdot \frac{(l - j_s)!}{(l_s - 2)! \cdot (j_s - 2)!}$$

$$\frac{(D - j_s - n - l_i)! \cdot (n - j_i)!}{(D + j_s - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 < j_{ik} \leq j_{sa}^{ik} + j_{sa}^{ik} - j_s \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_{ik} + j_{sa} - s \wedge j^{sa} - j_{sa} - s \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_{sa} + j_{sa} - s > l_{sa} \wedge$

$((D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, l_{k_2}, j_{sa}, \dots, l_{k_3}, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k$

$l_{k_2}: z = 2 \wedge k = k_1 + k_2 + k_3) \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, l_{k_2}, j_{sa}, \dots, l_{k_3}, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k \wedge$

$l_{k_2}: z = 2 \wedge k = k_2 + k_3) \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, j_{sa}, \dots, l_{k_3}, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k \wedge$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

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$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\}$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \vee$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{l_{ss}} = \sum_{k=1} \sum_{(j_s=2)}^{(l_s)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s} \sum_{(j_{sa}=j_{ik}+l_{sa}-l_{ik})}^{( )} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_i=j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{( )} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - l_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\}) \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

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$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \Rightarrow$$

$$f_{z=1}^{iSS}(j_{ik}, j_{sa}, j_i) = \sum_{k=1}^{(l_s)} \sum_{(j_s=2)}^{(l_s)}$$

$$\sum_{j_{ik} + l_{ik} - l_s}^{(j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})} \sum_{j_i = j_{sa} + l_i - l_{sa}}^{(j_s)}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - k_1}^{(n_i - j_s + 1)}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - k_2)}^{(j_s)}$$

$$\sum_{n_s = n_{sa} + j_{sa} - j_i - k_3}^{(j_s)}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

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$$(D \geq n < n \wedge I = k > 0 \wedge$$

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$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$fz S_{j_s, j_{ik}, j_{sa}, j_i}^{iSS} = \sum_{i=1}^{\binom{D}{j_s}} \sum_{(j_s=2)}^{\binom{D}{j_s}}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{\binom{D}{j_s+j_{sa}^{ik}-1}} (j_{sa}=j_{ik}-l_{ik}) j_i=j_{sa}+j_{sa}^{ik}-l_{ik}$$

$$\sum_{n_i=0}^n \mathbb{k} (n_{is}=n_{is}+j_s+1) n_{ik} j_{ik}^{i-1} n_{sa}^{i-1} n_{sa}^{i-1} n_{sa}^{i-1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}^{i-1}-l_{ik_2})}^{\binom{D}{n_{sa}+j_{sa}^{i-1}-l_{ik_2}}} n_s=n_{sa}+j_{sa}^{i-1}-l_{ik_3}$$

$$\frac{(n_{i_s}+j_{sa}^{i-1}+j_{sa}^{i-1}-l_{ik_2})!}{(n_{i_s}+j_{sa}^{i-1}-l_{ik_2})!} \frac{(n_{ik}-s-I-j_{sa}^s)!}{(n_{ik}+j_s+j_{sa}^{i-1}-j_{ik}-s-j_{sa}^s)!}$$

$$\frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!}$$

$$\frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_i \leq D - n \wedge$$

$$j_s \leq j_s \leq j_s - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{i-1} - j_{sa}^{i-1} = j_i + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{i-1} = l_s \wedge l_{sa} + j_{sa}^{i-1} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

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$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z S_{j_s, j_{ik} j_{sa}, j_i}^{iSS} = \sum_{k=1} \sum_{(j_s=2)}^{(I_s)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s} \sum_{\binom{()}{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+l_k}^n \sum_{\binom{()}{n_{is}=n+l_k-j_s+1}}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{\binom{()}{n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2}}^{(n_i-j_s+1)} \sum_{n_s=n_{sa}+j_s-j_i-k_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - j_s)!}{(n_i - n - l)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - j_s)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s - 1)! \cdot (j_s - 2)!} \cdot \frac{(D - j_s - 1)!}{(D + j_s - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{ik}^{ik} \leq j_{ik} \leq j_s + j_{sa}^{ik} - j_{ik} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_{ik} + j_{sa} - s \wedge j^{sa} - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_{sa} + j_{sa} - s > l_{sa} \wedge$$

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$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_2: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$



$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\}$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \vee$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{l_{ss}} = \sum_{k=1} \sum_{(j_s=2)}^{(l_s)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j_{sa}=j_{ik}+l_{sa}-l_{ik})}^{( )} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{( )} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - l_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\}$$

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$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

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$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

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$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

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$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$f_{z=1}^{iSS} j_{ik}, j_{sa}, j_i = \sum_{k=1}^{(l_s)} \sum_{(j_s=2)}^{(l_s)}$$

$$\sum_{j_{ik}}^{(j_{ik} + j_{sa}^{ik} - 1)} \sum_{(j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}^{(j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})} \sum_{j_i = j_{sa} + l_i - l_{sa}}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)}^{(j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})} \sum_{n_s = n_{sa} + j_{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!} \cdot$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

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$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz^{\text{ISS}}_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{j_s=j_{ik}+j_{sa}-l_{ik}}^{( )} \sum_{j_{ik}=j_{sa}+j_i-l_{ik}}^{( )} \sum_{j_i=l_i+n-D}^{( )} \sum_{n_i=n+l_{ik}}^{( )} \sum_{n_i=n+l_{ik}-j_s}^{( )} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{( )} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}^{( )} \frac{(n_i - n_{ik} - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_s - j_s - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\geq n < n \wedge l_s > 1 \wedge l_i \leq D - n + 1 \wedge$$

$$1 \leq j_{ik} \leq j_{ik} - j_{sa} \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_s - j_{sa}^{ik} = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

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$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

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$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

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$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\}$$

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$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{iss} = \sum_{k=1}^{()} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()} \sum_{(j_{ik}=j_{sa}+l_{ik}-l_{sa})}^{()} \sum_{(j_{sa}=j_i+j_{sa}-s)}^{()} \sum_{(j_i=l_i+n_{ik})}^{l_{ik}+s-j_{sa}^{ik}} \sum_{(n_i=n+l_k)}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n_{is}-j_{ik}-k_1)}^{()} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-k_2)}^{()} \sum_{(n_s=n_{sa}+j_{sa}-j_i)}^{()} \frac{(n_i+j_s-j_{ik}-s-j_{sa}^s)!}{(n_i+n-1)! \cdot (n_{is}+j_{sa}-j_i-j_{sa}^s)!} \cdot \frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!} \cdot \frac{(D-l_i)!}{(D-j_i-n-l_i)! \cdot (n-j_i)!}$$

$D \geq n < n \wedge l_s > 1 \wedge l_s = 2 - n + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq n - a + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa}^{ik} - j_{sa} \leq j_{sa}^{ik} \leq j_i + j_{sa} - s \wedge n - a + j_{sa}^{ik} - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_{sa} \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$D + j_{sa} - n < l_i \leq D - l_s + s - j_{sa} - 1 \wedge$

$(D \geq n < n \wedge I = k > 0) \wedge$

$s: \{j_s^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 7 \wedge s = s + k \wedge$

$k_z: z = 2 \wedge k = k_1 + k_2 + k_3) \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k \wedge$

$k_z: z = 2 \wedge k = k_2 + k_3) \vee$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \vee$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{ISS} = \sum_{k=1} \sum_{(j_s = j_{ik} + l_s - l_{ik})}^{( )}$$

$$\sum_{j_{ik} = j_{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j_{sa} = j_i + l_{sa} - l_i)}^{( )} \sum_{j_i = l_i + n - D}^{l_{ik} + s - j_{sa}^{ik}}$$

$$\sum_{n_i = n + k}^n \sum_{(n_i = n + k - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - k_1}$$



$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{( )} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} - s - j_{sa} \leq j_{sa} \leq n -$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - j_{ik} \wedge l_i + j_{sa} - s > l_s \wedge$

$D + s - n < l_i \leq D + l_s + s - n - 1$

$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 7 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = (\mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 6, s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = (\mathbb{k}_2 + \mathbb{k}_3) \vee$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 5, s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$$s \geq 6 \wedge \mathbf{s} = \mathbf{s} + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = \mathbf{s} + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = \mathbf{s} + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = \mathbf{s} + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{ISS} = \sum_{k=1}^{(\cdot)} \sum_{(j_s = j_{ik} + l_s - l_{ik})}^{(\cdot)}$$

$$\sum_{j_{ik} = j_{sa} + j_{sa}^{ik} - j_{sa}}^{(\cdot)} \sum_{(j_{sa} = j_i + j_{sa} - s)}^{(\cdot)} \sum_{j_i = l_i + n - D}^{l_{ik} + s - j_{sa}^{ik}}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)}^{(\cdot)} \sum_{n_s = n_{sa} + j_{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

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$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

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$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

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$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$\begin{aligned} & \sum_{j_{ik}=j_{sa}^s+l_{ik}}^{(n_i-j_{sa}^s-1)} \sum_{j_i=l_i+n-D}^{(l_s+s-1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(n_{is}=n+\mathbb{k}-j_s+1)} \sum_{n_s=n_{sa}+j_{sa}^s-j_i-\mathbb{k}_3}^{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^s-\mathbb{k}_2)} \\ & \frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!} \cdot \\ & \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\ & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \end{aligned}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

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$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

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$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

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$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

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$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

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$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

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$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i}^{iss} = \sum_{k=1}^{( )} \sum_{(j_s = j_{ik} + l_s - l_k)}^{( )} \sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}}^{( )} \sum_{(j^{sa} = j_i + l_i - l_{sa})}^{( )} \sum_{l_i = n - D}^{l_s + s - 1} \sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik}}^{(n_i - j_s + 1)} \sum_{(n_{ik} + j_{ik} - l_{sa} - k_2) n_s = n_s}^{(n_i - j_s + 1)} \sum_{j_i = k_3}^{(n_i - j_s + 1)} \frac{(n_i + j_s - n_{ik} - j_{ik} - j_i - I - j_{sa}^s)!}{(n_i - n - I)! \cdot (n_{is} + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} - j_{sa} - j_{sa}^{ik} \leq j^{sa} + j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$n_{ik} - j_{sa}^{ik} - 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \wedge l_s + s - n - 1 \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$\{j_{sa}^s, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

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$$s \geq 6 \wedge s = s + k \wedge$$

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$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

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$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3)) \Rightarrow$$

$$fz S_{j_s, j_{ik}, j_{sa}, j_i}^{iss} = \sum_{k=1} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{( )}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}} \sum_{\binom{()}{j^{sa}=j_i+l_{sa}-l_i}} \sum_{j_i=l_i+n-D}^{l_s+s-1}$$

$$\sum_{n_i=n+k}^n \sum_{\binom{(n_i-j_s+1)}{n_{is}=n+k-j_s+1}} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{ik}}$$

$$\sum_{\binom{()}{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}} \sum_{n_s=n_{sa}+j_{sa}-j_i-k_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - j_s)!}{(n_i - n - l)! \cdot (n + j_s - j_{sa}^{ik} - j_{ik} - j_s)!} \cdot \frac{(l_s - 2)!}{(l_s - 1)! \cdot (j_s - 2)!}$$

$$\frac{(D + j_s - n - l_i)! \cdot (n - j_i)!}{(D + j_s - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{ik} - 1 < j_{ik} \leq j_{sa}^{ik} + j_{sa}^{ik} - j_{ik} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_{ik} - j_{sa} - s \wedge j^{sa} - j_{sa} - s \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_{sa} + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}^i, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + (k_2 + k_3) \vee$$

$$(D \geq n < n \wedge l = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}^i, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge l = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}^i, \dots, k_3, j_{sa}^i\} \wedge$$



$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{iss} = \sum_{k=1}^{()} \sum_{(j_s = j_{ik} + l_s - l_{ik})}$$

$$\sum_{j_{ik} = j_{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j_{sa} = j_i + j_{sa} - s)}^{()} \sum_{j_i = l_i + n - D}^{l_s + s - 1}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - k_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - k_2)}^{()} \sum_{n_s = n_{sa} + j_{sa} - j_i - k_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - l_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$S_{j_{sa}, j_{sa}}^{iss, j_i} = \sum_{k=1}^{\binom{()}{j_s=j_{ik}-j_{sa}^{ik}+1}} \sum_{j_{ik}=j_{sa}^{ik}+l_{ik}-l_{sa}}^{\binom{()}{j_{sa}=j_i+j_{sa}-s}} \sum_{j_i=l_i+n-D}^{l_s+s-1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{\binom{()}{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}} \frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz_{j_s}^{i_{ss}} j_{ik} j_{sa}^i = \sum_{k=1}^{\lfloor \frac{j_s}{j_{ik}} \rfloor} \sum_{i=1}^{\lfloor \frac{j_s + j_{sa} - j_{ik}}{j_{sa}} \rfloor} \sum_{j_i=1}^{\lfloor \frac{j_s + j_{sa} - j_{ik} - j_{sa}}{j_{sa}} \rfloor} \sum_{j_{sa}=1}^{\lfloor \frac{j_s + j_{sa} - j_{ik} - j_{sa} - j_i}{j_{sa}} \rfloor} \dots$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_s + j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i}^{l_{ss}} = \sum_{k=1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)}^{(l_{sa})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{j_s=j_{ik}-\mathbb{k}_1}^{j_s}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_2)}^{( )} \sum_{(n_s=j^{sa}-j_i-\mathbb{k}_3)}^{( )}$$

$$\frac{(n_i - j_i + j_{sa}^{lk} - j_{ik} - s)!}{(n_i - n - l)! \cdot (n + j_s - j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - 1 + 1 \wedge$

$1 \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_i \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{lk} - j_{sa} \leq j_{sa} - s \leq j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$

$j_s + s - 1 < l_i \leq D + 1 + s - n - 1 \wedge$

$((D > n < n) \wedge l_s > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 7 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$

$(D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + \mathbb{k} \wedge$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\}$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{ISS} = \sum_{k=1} \sum_{(j_s = j_{ik} + l_s - l_{ik})}^{( )}$$

$$\sum_{j_{ik} = j^{sa} + l_{ik} - l_{sa}} \sum_{(l_{ik} + j_{sa} - j_{sa}^{ik})} \sum_{j_i = j^{sa} + s - j_{sa}}$$



$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_2} \frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!} \cdot \frac{(l_s - 2)!}{(l_s - 1)! \cdot (l_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - l_i - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} - j_{sa}^{ik} - j_{sa}$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j_i + s - j_{sa} \leq j_i < n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_i > l_{ik} \wedge l_{sa} - j_{sa} - s = l_s \wedge$

$D + s - n < l_i \leq D + l_s - n - 1 \wedge$

$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\}$

$s \geq 7 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \wedge$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \dots) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{ISS} = \sum_{k=1} \sum_{(j_s = j_{ik} + l_s - l_{ik})}^{( )}$$

$$\sum_{j_{ik} = j_{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(l_{ik} + j_{sa} - j_{sa}^{ik})} \sum_{(j_{sa} = l_i + n + j_{sa} - D - s)} \sum_{j_i = j_{sa} + l_i - l_{sa}}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)}^{( )} \sum_{n_s = n_{sa} + j_{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = \mathbf{s} + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = \mathbf{s} + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = \mathbf{s} + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz^D j_{sa}^s \dots j_{sa}^{ik} j_{sa} \dots j_{sa}^i \sum_{n_i=j_{ik}+l_s-l_{ik}} \sum_{n_s=j_{sa}+s-j_{sa}} \sum_{j_{ik}=j_{sa}^{ik}-j_{sa}} \sum_{n_i=n+l_k} \sum_{n_s=n+l_k-j_s+1} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3} \frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > 1 \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z^{ISS} S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{j_s=j_{ik}+j_{sa}-l_{ik}}^{(s)} \sum_{j_{ik}=j_{sa}+l_{ik}-l_{sa}}^{(l_s+1)} \sum_{j_i=j_{sa}+s-j_{sa}}^{(l_s+1)} \sum_{n_i=n+\mathbb{k}}^{(n_i+1)} \sum_{n_i=n+\mathbb{k}-j_s}^{(n_i+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(n_i+1)} \sum_{(n_i+1)}^{(n_i+1)} \sum_{(n_i+1)}^{(n_i+1)} \frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\geq n < n \wedge l_s > 1 \wedge l_i \leq D - n + 1 \wedge$$

$$1 \leq j_{ik} \leq j_{ik} - j_{sa} \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_s - j_{sa}^{ik} = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\}$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{iSS} = \sum_{k=1}^{(\cdot)} \sum_{(j_s = j_{ik} + l_s - l_{ik})}^{(\cdot)}$$

$$\sum_{j_{ik} = j_{sa} + j_{sa}^{ik} - j_{sa}}^{(l_s + j_{sa} - 1)} \sum_{(j_{sa} = l_i + n + j_{sa} - D - s)}^{(l_s + j_{sa} - 1)} \sum_{j_i = j_{sa} + l_i - l_{ik}}^{(l_s + j_{sa} - 1)}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} - j_{ik} - k_1}^{(n_i - j_s + 1)}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - l_{ik})}^{(\cdot)} \sum_{(n_s = n_{sa} + j_{sa} - j_i)}^{(\cdot)}$$

$$\frac{(n_i + j_s - j_{ik} - s - j_{sa}^s)!}{(n_i - n + l)! \cdot (n_i - j_s + j_{sa} - j_i - s - j_{sa}^s)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s = D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq n + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa} \leq j_{ik} < j_i + j_{sa} - s \wedge n + j_{sa}^{ik} - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > 0 \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa}^{ik} - n < l_i \leq D - l_s + s - j_{sa}^{ik} - 1 \wedge$$

$$(D \geq n < n \wedge I = k > 0) \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$z = 2 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$



$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k \wedge$

$k_z: z = 2 \wedge k = k_1 + k_3) \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k \wedge$

$k_z: z = 2 \wedge k = k_1 + k_2) \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 5 \wedge s = s + k \wedge$

$k_z: z = 1 \wedge k = k_1) \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 5 \wedge s = s + k \wedge$

$k_z: z = 1 \wedge k = k_2) \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 5 \wedge s = s + k \wedge$

$k_z: z = 1 \wedge k = k_3) \vee$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{ISS} = \sum_{k=1} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{( )}$$

$$\sum_{j_{ik} = j_{sa}^{ik} + l_{ik} - l_{sa}} \sum_{(j_{sa} = l_i + n + j_{sa} - D - s)}^{(l_s + j_{sa} - 1)} \sum_{j_i = j_{sa}^{ik} + l_i - l_{sa}}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{( )} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_{ik} < n$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > j_{ik} \wedge l_i + j_s - s > l_s \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = (\mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6, s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = (\mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5, s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{ISS} = \sum_{k=1}^{\binom{)}{}} \sum_{(j_s = j_{ik} + l_s - l_{ik})}$$

$$\sum_{j_{ik} = j_{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(l_s + j_{sa} - 1)}^{(j_{sa} = l_i + n + j_{sa} - D - s)} \sum_{j_i = j_{sa} + s - j_{sa}}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)}^{\binom{)}{}} \sum_{n_s = n_{sa} + j_{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$\begin{aligned} & \sum_{j_{ik} = n + \mathbb{k} + l_{ik} - l_{sa}}^{(l_s + j_{sa} - 1)} \sum_{j_i = j_{sa} + s - j_{sa}}^{(n_i - j_{sa} - 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}^{(n_{is} = n + \mathbb{k} - j_s + 1)} \sum_{n_s = n_{sa} + j_{sa} - j_i - \mathbb{k}_3}^{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)} \frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!} \\ & \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \\ & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \end{aligned}$$

$$s \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$s \geq 5 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i}^{ISS} = \sum_{k=1}^{( )} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{( )}$$

$$\sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}}^{(l_s + j_{sa} - 1)} \sum_{(j^{sa} = l_i + n + j_{sa} - D - s)}^{(l_s + j_{sa} - 1)} \sum_{j_i = \dots}^{(l_s + j_{sa} - 1)}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{(n_{ik} = n_{is} + j_s - j_{ik})}^{(n_i - j_s + 1)}$$

$$\frac{(n_i + j_s + j_{ik} - j_{ik} - I - j_{sa}^s)!}{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s \leq j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa}^{ik} - j_{sa}^{ik} \leq j^{sa} + j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$

$j_{ik} - j_{sa}^{ik} = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$

$D + n < l_i + l_s + s - n - 1 \wedge$

$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$\{s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 7 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3)) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{ISS} = \sum_{k=1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )}$$



$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{(n_s=n_{sa}+j_s-j_i-k_3)}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa})!}{(n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa})!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - I)!}{(D + j_s + n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} \leq j_{ik} \leq j_s + j_{sa}^{ik} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + j_{sa} - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_{sa} + j_{sa} - s > l_{sa} \wedge$$

$$D + n < n < l_i \leq l_s + s - n - 1 \wedge$$

$$(D \geq n < n) \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

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$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

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$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

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$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{iss} = \sum_{k=1}^{(\cdot)} \sum_{(j_s = j_{ik} + l_s - l_{ik})}^{(\cdot)}$$

$$\sum_{j_{ik} = l_i + n + j_{sa}^{ik} - D - s}^{l_{ik}} \sum_{(j_{sa} = j_{ik} + l_{sa} - l_{ik})}^{(\cdot)} \sum_{j_i = j_{sa} + s - j_{sa}}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - k_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - k_2)}^{(\cdot)} \sum_{n_s = n_{sa} + j_{sa} - j_i - k_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - l_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

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$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$S_{j_s, j_i}^{iss} = \sum_{k=1}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )}$$

$$= \sum_{(j_{sa}^{ik}+j_{sa}-D-s)}^{( )} \sum_{(j_s=j_{ik}+j_{sa}-j_{sa}^{ik})}^{( )} \sum_{(j_i=j_{sa}^{ik}+l_i-l_{sa})}^{( )}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-\mathbb{k}_2)}^{( )} \sum_{n_s=n_{sa}+j_{sa}^{ik}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!} \cdot$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

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$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

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$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz_{j_s}^{iSS} j_{ik} j_{sa}^i = \sum_{k=1}^{\mathbb{k}} (j_s = j_{ik}) l_{ik}$$

$$\sum_{j_{ik}=i+n+l_{ik}-D-s}^{l_{ik}} \sum_{j_{sa}^i=j_{sa}^i-j_{ik}}^{( )} \sum_{j_{sa}^i=j_{sa}^i-j_{ik}}^{( )}$$

$$\sum_{n_i=n+l_{ik}}^n \sum_{(n_{is}=n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{( )} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{sa}^{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{sa}^{ik} + j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i}^{l_{ss}} = \sum_{k=1}^{l_s} \sum_{(j_s = j_{ik} + l_s - l_{ik})}^{( )}$$

$$\sum_{j_{ik} = l_i + n + j_{sa}^{ik} - D - s}^{l_s + j_{sa}^{ik} - 1} \sum_{(j^{sa} = j_{ik} + l_{sa} - l_{ik})}^{( )} \sum_{j_i = j^{sa} + s - j_{sa}}^{( )}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{(n_{ik} = n_i + j_{sa} - \mathbb{k}_1)}^{( )}$$

$$\sum_{(n_{sa} = n_i + j_{sa} - \mathbb{k}_2)}^{( )} \sum_{(n_s = n_i + j^{sa} - j_i - \mathbb{k}_3)}^{( )}$$

$$\frac{(n_i + j_{sa} - \mathbb{k}_1 - s - 1)!}{(n_i - n - l)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_{ik} \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} - j_{sa} \leq j_i \leq j_{sa} - s - j_{sa}^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n \leq l_i \leq D + s - n - 1 \wedge$$

$$((D - n < n \wedge l_s > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$7 \wedge l_s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$



$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

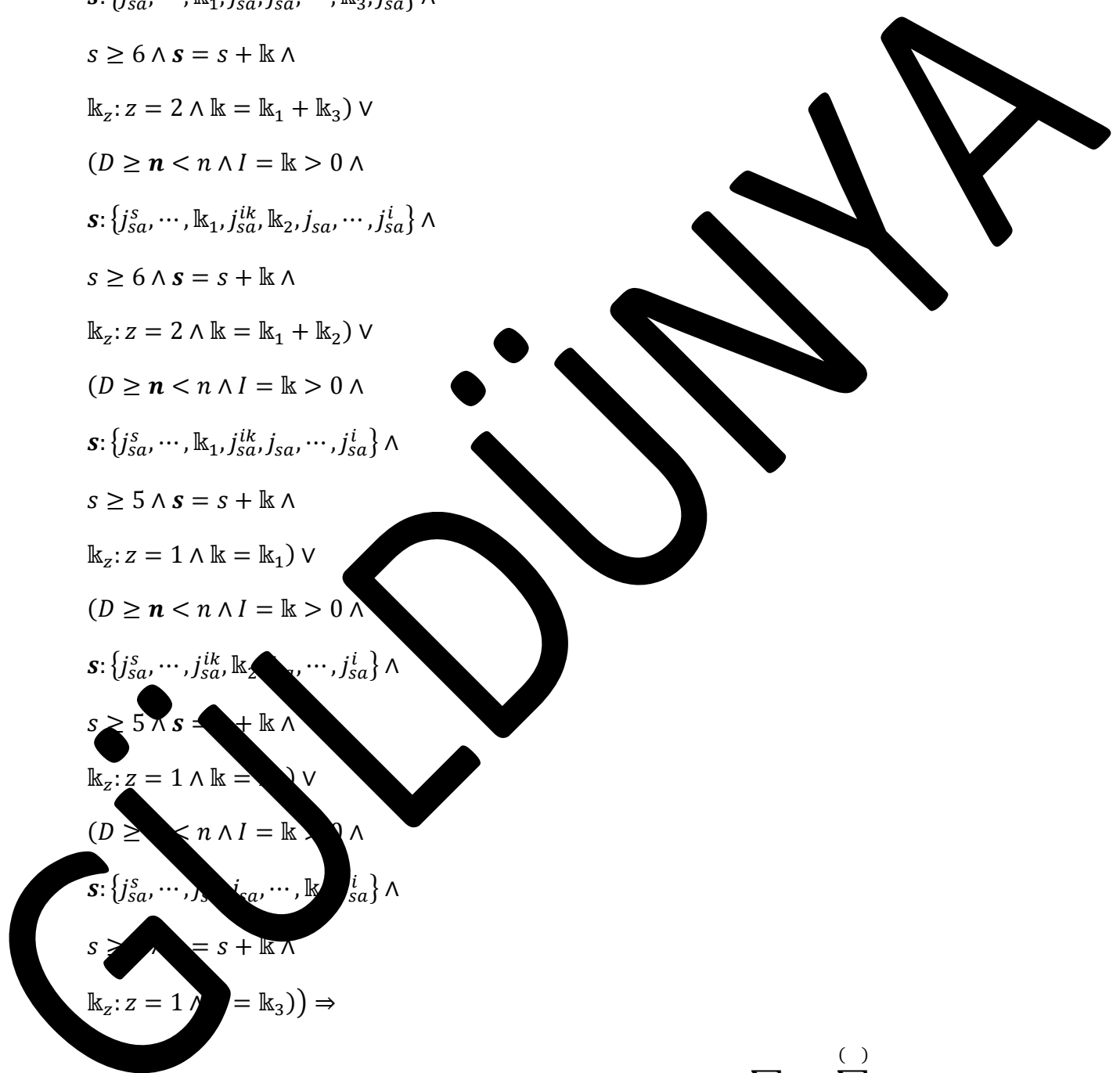
$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_1, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3)) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i}^{iss} = \sum_{k=1} (j_s = j_{ik} + l_s - l_{ik}) \sum_{()} ( )$$

$$\sum_{j_{ik} = l_i + n + j_{sa}^{ik} - D - s}^{l_s + j_{sa}^{ik} - 1} \sum_{()} ( ) \sum_{j_i = j^{sa} + l_i - l_{sa}} ( )$$



$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{i_s}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{i_s}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_2} \frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!} \cdot \frac{(l_s - 1)!}{(l_s - 1)! \cdot (l_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - l_i - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} - j_{sa}^{ik} - j_{sa}$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j_i + s - j_{sa} \leq j_{ik} < n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_i = l_{ik} \wedge l_{sa} + j_{sa} - s = l_i \wedge$$

$$D + s - n < l_i \leq D + l_s - n - 1 \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\}$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3 \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \dots) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{ISS} = \sum_{k=1} \sum_{(j_s = j_{ik} - j_{sa} + 1)}^{( )}$$

$$\sum_{j_{ik} = l_i + n + j_{sa}^{ik} - D - s}^{l_s + j_{sa}^{ik} - 1} \sum_{(j_{sa} = j_{ik} + l_{sa} - l_{ik})}^{( )} \sum_{j_i = j_{sa} + l_i - l_{sa}}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_i = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)}^{( )} \sum_{n_s = n_{sa} + j_{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$\sum_{j_s=j_{ik}+l_s-l_{ik}} \sum_{j_i=j_{sa}+s-j_{sa}} \sum_{j_{ik}=l_{ik}+j_{sa}^{ik}-D-s} \sum_{j_{sa}^{ik}=j_{ik}+j_{sa}-j_{sa}^{ik}} \sum_{n_i=n+\mathbb{k}} \sum_{n_{is}=n+\mathbb{k}-j_s+1} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3} \frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz S_{j_s, j_{ik}, j_{sa}, j_i}^{ISS} = \sum_{(j_s=j_{ik}+j_{sa}^{ik}+1)}^{(\cdot)}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-l_s}^{l_s+j_{sa}^{ik}-1} \sum_{j_i+l_{sa}-l_{ik}=j_{sa}+s-j_{sa}}^{(\cdot)}$$

$$\sum_{n_i=n+\mathbb{k} (n_i+n+\mathbb{k}-j_s+\dots)}^{(n_i+n+1)} \sum_{j_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(\cdot)}$$

$$\sum_{(n_i+n+l_{sa}+j_{sa}^{ik}-l_s-\mathbb{k}_2)}^{(\cdot)} \sum_{n_s=n_{sa}+j_{sa}^{ik}-j_i-\mathbb{k}_3}^{(\cdot)}$$

$$\frac{(n_i+n+l_{sa}+j_{sa}^{ik}-l_s-\mathbb{k}_2) + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_i \leq D - n + 1 \wedge$$

$$1 \leq j_{ik} - j_{sa}^{ik} - 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} - 1 \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$j_{ik} - 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \dots) \vee$$

$$(D \geq \dots < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq \dots = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \dots = \mathbb{k}_2) \vee$$

$$(D \geq \dots < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$



$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{iss} = \sum_{k=1}^{( )} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik} = l_i + n + j_{sa}^{ik} - D - s}^{l_s + j_{sa}^{ik} - 1} \sum_{(j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}^{( )} \sum_{j_i = j_{sa} + l_i - \dots}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + \dots - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)}^{( )} \sum_{(n_{sa} + j_{sa} - j_i - \dots)}$$

$$\frac{(n_i + j_s + \dots - s - j_{sa}^s)!}{(n_i - n + \dots)! \cdot (n_{is} + j_{sa}^{is} - j_{sa}^s)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq \dots - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{is} - 1 \leq j_{ik} \leq \dots + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa}^{is} + j_i + j_{sa} - s \wedge j_{sa}^{is} - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = \dots \wedge l_{sa} + j_{sa}^{ik} - j_{sa}^{is} - l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + \dots - n < l_i \leq D - l_s + s - \dots - 1 \wedge$$

$$((D \geq n \dots \wedge I = \mathbb{k} > \dots) \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{is}, \dots, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = \dots + \mathbb{k} \wedge$$

$$\dots (\mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{is}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\}$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_1, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$fz S_{j_s, j_{ik}, j_{sa}, j_i}^{ISS} = \sum_{k=1}^{(l_{sa}-j_{sa}+1)} \sum_{(j_s=l_i+n-D-s+1)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s} \sum_{(j_{sa}=j_{ik}+l_{sa}-l_{ik})} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_2} \frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!} \cdot \frac{(l_s - 1)!}{(l_s - 1)! \cdot (l_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - l_i - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} - j_{sa}^{ik} - j_{sa}$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j_i + s - j_{sa} \leq j_{ik} < n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_i - l_{ik} \wedge l_{sa} - j_{sa} - s > 0 \wedge$

$D + s - n < l_i \leq D + l_s - n - 1 \wedge$

$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\}$

$s \geq 7 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \vee$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \dots) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{ISS} = \sum_{k=1} \sum_{(j_s = l_i + n - D - s + 1)}^{(l_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik} = j_s + l_{ik} - l_s} \sum_{(j_{sa} = j_{ik} + l_{sa} - l_{ik})} \sum_{j_i = j_{sa} + s - j_{sa}}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)}^{( )} \sum_{n_s = n_{sa} + j_{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

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$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

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$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz S_{j_s, j_{sa}, j_i}^{i_s, j_{sa}, j_i} = \sum_{k=1}^{(l_{ik}-j_{sa}+1)} \sum_{j_s=l_i+n-D-s+1}$$

$$\sum_{j_s+l_{ik}-l_s}^{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j_{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^{(n_i-j_s+1)} \sum_{(n_{is}=n+\mathbb{k}-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j_{sa}^{ik}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$



$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{ISS} = \sum_{l_i=1}^{(j_{sa}^{ik}+1)} \sum_{l_{ik}=l_i+n-s+1}^{(j_{sa}^{ik}+1)} \sum_{j_{ik}=j_s+l_{ik}}^{(j_{sa}^{ik}+1)} \sum_{j_{ik}+j_{sa}-j_s+l_{ik}=j_{sa}+s-j_{sa}}^{(j_{sa}^{ik}+1)} \sum_{n_i=n+\mathbb{k}}^{(n+\mathbb{k}-j_s+l_{ik})} \sum_{n_i+\mathbb{k}-j_s+l_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(n+\mathbb{k}-j_s+l_{ik})} \sum_{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{(n+\mathbb{k}-j_s+l_{ik})} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}^{(n+\mathbb{k}-j_s+l_{ik})} \frac{(n_{is}+j_s+j_{sa}^{ik}-j_{ik}-s-I-j_{sa}^s)!}{(n_i-n-s+I)! \cdot (n+j_s+j_{sa}^{ik}-j_{ik}-s-j_{sa}^s)!} \cdot \frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!} \cdot \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_i \leq D - n + 1 \wedge$$

$$1 \leq j_{ik} - j_{sa}^{ik} - 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$j_{sa}^{ik} - 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$



$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \Rightarrow$$

$$fz S_{j_s, j_{ik}, j_{sa}, j_i}^{iSS} = \sum_{k=1} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})} \sum_{j_i=j^{sa}+s-j_{ik}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{sa}-j^{sa})} \sum_{(n_s=n_{sa}+j^{sa}-j_{sa})}$$

$$\frac{(n_i + j_s - j_{ik} - s - j_{sa}^s)!}{(n_i - n - l)! \cdot (n_i - j_s + j_{sa}^s - j_{sa}^s - j_{sa}^s)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{sa} - 1 \leq j_{ik} \leq j_s + j_{sa}^{sa} - j_{sa}^{sa} \wedge$$

$$j_{ik} + j_{sa}^{sa} - j_{sa}^{sa} \leq j_{ik} \leq j_i + j_{sa} - s - j_{sa}^{sa} + j_{sa}^{sa} - j_{sa}^{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 \leq l_{sa}^{sa} - j_{sa}^{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D - n < l_i \leq D - l_s + s - 1 \wedge$$

$$(D \geq n < n \wedge I = k > 0) \wedge$$

$$s: \{j_s^s, \dots, k_1, j_{sa}^{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k; z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k \wedge$

$k_z: z = 2 \wedge k = k_1 + k_3) \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k \wedge$

$k_z: z = 2 \wedge k = k_1 + k_2) \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 5 \wedge s = s + k \wedge$

$k_z: z = 1 \wedge k = k_1) \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 5 \wedge s = s + k \wedge$

$k_z: z = 1 \wedge k = k_2) \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

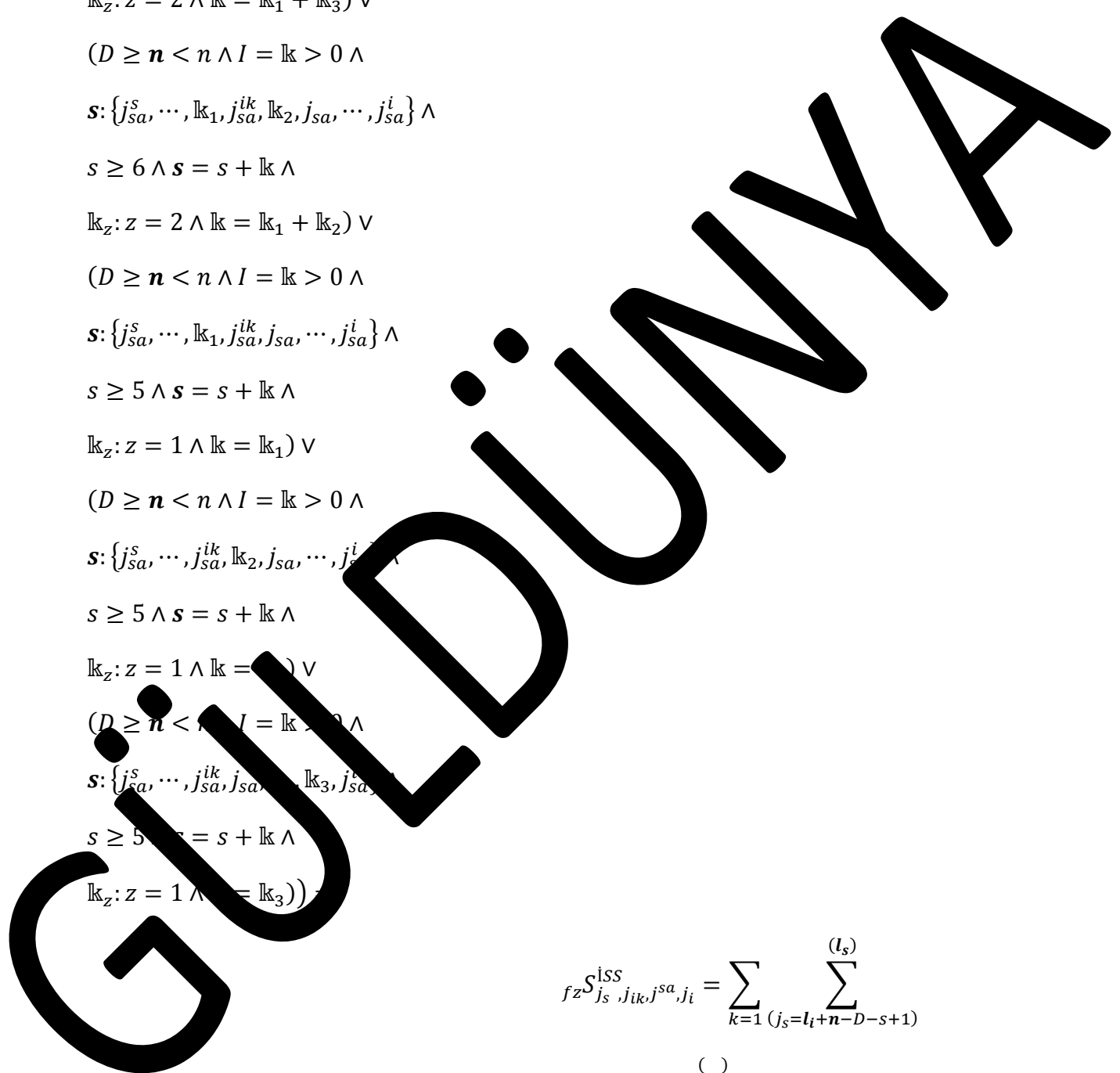
$s \geq 5 \wedge s = s + k \wedge$

$k_z: z = 1 \wedge k = k_3) \vee$

$$fz S_{j_s, j_{ik}, j_{sa}, j_i}^{iss} = \sum_{k=1} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{( )} \sum_{j_i=j_{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}$$



$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{( )} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3} (n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)! / ((n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!)$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_s)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} - s - j_{sa} \leq j_{sa} < n$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - j_{ik} \wedge l_i + j_{sa} - s = l_s \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = (\mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6, s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = (\mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5, s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{iss} = \sum_{k=1}^{(l_s)} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(n)} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{(n)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(n)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z S_{j_s}^{i_s} \sum_{i_k=j_s+l_k-l_s}^{(l_s)} \sum_{j_i=j_{sa}^s+s-j_{sa}}^{(l_s)} \sum_{n_i=n+l_k}^{(n_i-j_i-1)} \sum_{n_s=n_{sa}+j_{sa}^s-j_i-l_{k_3}}^{(n_s=n_{ik}+j_{ik}-j_{sa}^s-l_{k_2})}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$s \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$



$s \geq 5 \wedge s = s + k \wedge$

$k_z: z = 1 \wedge k = k_3) \Rightarrow$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i}^{iss} = \sum_{k=1} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})} \sum_{j_i=j_s+l_{sa}-j_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - I - j_{sa}^s)!}{(n_i - n - I)! \cdot (n_{is} + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} - j_{sa} - j_{sa}^{ik} \leq j^{sa} + j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$

$j_{sa} - j_{sa}^{ik} - 1 > l_s \wedge l_{sa} - j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$D + s - n < l_i \wedge l_s + s - n - 1 \wedge$

$((D \geq n < n \wedge I = k > 0 \wedge$

$\{j_{sa}^s, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 7 \wedge s = s + k \wedge$

$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3)) \Rightarrow$$

$$f_z^{S_{j_s, j_{ik}, j_{sa}, j_i}^{iSS}} = \sum_{k=1} \sum_{(j_s=l_i+n-D-s+1)}^{(I_s)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{\binom{()}{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}} \sum_{j_i=j_{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{\binom{()}{n_{is}=n+k-j_s+1}} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{\binom{()}{n_{sa}=n_{ik}+j_{ik}-j_{sa}-k_2}} \sum_{n_s=n_{sa}+j_{sa}-j_i-k_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - j_{sa} - j_{sa}^s)!}{(n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - j_{sa} - j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s - 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - n - I)!}{(D + j_s - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} \leq j_{ik} \leq j_s + j_{sa}^{ik} - j_s \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq j_{ik} + j_{sa} - s \wedge j_{sa}^{ik} - j_{sa} \leq j_s \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_{sa} + j_{sa} - s = l_{sa} \wedge$

$D + j_s - n < l_{sa} \wedge D + l_s + j_{sa} - n - 1 < l_{sa}$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 7 \wedge s = s + k \wedge$

$k_z: z = 3 \wedge k = k_2 + k_3) \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k \wedge$

$k_z: z = 2 \wedge k = k_2 + k_3) \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{iSS} = \sum_{k=1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )}$$

$$\sum_{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j_{sa}=j_i+l_{sa}-l_i)}^{( )} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{ik}+s-j_{sa}^{ik}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_i=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{( )} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3} (n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)! / ((n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!)$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_s)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} - s - j_{sa} \leq j_s < n$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - j_{ik} \wedge l_i + j_s - s = l_s \wedge$

$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$

$((D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 7 \wedge s = s + k \wedge$

$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 6, s = s + k \wedge$

$k_z: z = 2 \wedge k = k_2 + k_3) \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 5, s = s + k \wedge$

$k_z: z = 2 \wedge k = k_1 + k_3) \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{ISS} = \sum_{k=1} \sum_{(j_s = j_{ik} + l_s - l_{ik})}^{( )}$$

$$\sum_{j_{ik} = j_{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j_{sa} = j_i + l_{sa} - l_i)}^{( )} \sum_{j_i = l_{sa} + \mathbf{n} + s - D - j_{sa}}^{l_s + s - 1}$$

$$\sum_{n_i = \mathbf{n} + \mathbb{k}}^n \sum_{(n_{is} = \mathbf{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)}^{( )} \sum_{n_s = n_{sa} + j_{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - \mathbf{n} - I)! \cdot (\mathbf{n} + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

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$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$\begin{aligned} & \sum_{j_{ik} = n + l_{ik} - l_{sa}}^{(n_i - j_{ik} + 1)} \sum_{j_{sa} = j_{sa} - l_i}^{(n_i - j_{sa} + 1)} \sum_{j_i = l_{sa} + n + s - D - j_{sa}}^{l_s + s - 1} \\ & \sum_{n_i = n + \mathbb{k}}^{(n_i - j_{ik} + 1)} \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_{ik} + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}^{(n_i - j_{ik} + 1)} \\ & \sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)}^{(n_i - j_{ik} + 1)} \sum_{n_s = n_{sa} + j_{sa} - j_i - \mathbb{k}_3}^{(n_i - j_{ik} + 1)} \\ & \frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!} \cdot \\ & \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\ & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \end{aligned}$$

$$n \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$



$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i}^{ISS} = \sum_{k=1} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{( )}$$

$$\sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j^{sa} = j_i + l_{sa} - l_i)}^{( )} \sum_{j_i = l_{sa} + n - D - j_{sa}}^{l_s + s - 1}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{j_{ik} = n_{is} + j_s - j_{ik}}^{( )}$$

$$\frac{(n_i + j_s + j_{ik} - j_{ik} - I - j_{sa}^s)!}{(n_i + j_s + j_{ik} - j_{ik} - I - j_{sa}^s)! \cdot (n_i + j_s + j_{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s \leq j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} - j_{sa}^{ik} \leq j^{sa} + j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$j_{ik} - j_{sa}^{ik} = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_i - n < l_{sa} + l_s + j_{sa} - n - 1 \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\{s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3)) \Rightarrow$$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i}^{lss} = \sum_{k=1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )}$$

$$\sum_{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}^{(l_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{(j_{sa}=l_{sa}+n-D)} \sum_{j_i=j_{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-l_{k2})}^{( )} \sum_{n_s=n_{sa}+j_{sa}-j_i-l_{k3}}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - j_{sa} - l_{k2} - j_{sa} - l_{k3})!}{(n_i - n - l)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - j_{sa} - l_{k2} - j_{sa} - l_{k3})!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_s + n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq j_i - j_{sa} - s \wedge j_{sa} + j_{sa}^{ik} - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_{sa} + j_{sa} - s = l_{sa} \wedge$$

$$D + j_s - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$(D \geq n < n) \wedge I = l_k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, l_{k1}, j_{sa}^{ik}, l_{k2}, \dots, l_{k3}, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + l_k \wedge$$

$$l_{kz}: z = 3 \wedge l_k = l_{k2} + l_{k3}) \vee$$

$$(D \geq n < n \wedge I = l_k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, l_{k1}, j_{sa}^{ik}, l_{k2}, j_{sa}, \dots, l_{k3}, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + l_k \wedge$$

$$l_{kz}: z = 2 \wedge l_k = l_{k2} + l_{k3}) \vee$$

$$(D \geq n < n \wedge I = l_k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, l_{k1}, j_{sa}^{ik}, j_{sa}, \dots, l_{k3}, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \dots) \Rightarrow$$

$$fz S_{j_s, j_{ik}, j_{sa}, j_i}^{iss} = \sum_{k=1}^{()} \sum_{(j_s = j_{ik} + l_s - l_{ik})}^{()}$$

$$\sum_{j_{ik} = j_{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j_{sa} = l_{sa} + n - D)}^{(l_s + j_{sa} - 1)} \sum_{j_i = j_{sa} + l_i - l_{sa}}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{i_s} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{i_s} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)}^{()} \sum_{n_s = n_{sa} + j_{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - l_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$S_{j_{sa}, j_{sa}, j_{sa}}^{iss} = \sum_{k=1}^{\binom{()}{j_s=j_{ik}-j_{sa}^{ik}+1}} \sum_{l_s=j_{sa}^{l_{ik}-l_{sa}}+1}^{\binom{()}{j_s=j_{sa}^{l_{ik}-l_{sa}}+1}} \sum_{j_i=j_{sa}^{l_i-l_{sa}}}^{\binom{()}{j_s=j_{sa}^{l_i-l_{sa}}+1}} \sum_{n_i=n+\mathbb{k}}^{\binom{()}{n_i=n+\mathbb{k}-j_s+1}} \sum_{n_{is}=n+\mathbb{k}-j_s+1}^{\binom{()}{n_i=n+\mathbb{k}-j_s+1}} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{\binom{()}{n_i=n+\mathbb{k}-j_s+1}} \sum_{n_{sa}=n_{ik}+j_{ik}-j_{sa}^{l_{ik}-l_{sa}}}^{\binom{()}{n_{sa}=n_{ik}+j_{ik}-j_{sa}^{l_{ik}-l_{sa}}}} \sum_{n_s=n_{sa}+j_{sa}^{l_i-l_{sa}}}^{\binom{()}{n_{sa}=n_{ik}+j_{ik}-j_{sa}^{l_{ik}-l_{sa}}}} \frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$



$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz S_{j_s}^{i s s} j_{i k} j_{s a}^{i s} = \sum_{k=1}^{\mathbb{k}} (j_s = j_{i k} + 1)$$

$$\sum_{j_{i k} = j_s + j_{s a}^{i k} - j_{s a}}^{(l_s + j_{s a} - j_{i k} - s - I - j_{s a}^s)} \sum_{a=l_{s a} + n}^{l_i - l_{s a}}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{i s} = n_i - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{i k} = n_{i s} + j_s - j_{i k} - \mathbb{k}_1}$$

$$\sum_{(n_{s a} = n_{i k} + j_{i k} - j_{s a} - \mathbb{k}_2)}^{( )} \sum_{n_s = n_{s a} + j_{s a} - j_i - \mathbb{k}_3}$$

$$\frac{(n + j_s + j_{s a}^{i k} - j_{i k} - s - I - j_{s a}^s)!}{(n_i - I)! \cdot (n + j_s + j_{s a}^{i k} - j_{i k} - s - j_{s a}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{i k} - j_{s a}^{i k} + 1 \wedge j_s + j_{s a}^{i k} - 1 \leq j_{i k} \leq j^{s a} + j_{s a}^{i k} - j_{s a} \wedge$$

$$j_s + j_{s a}^{i k} \leq j^{s a} \leq j_i + j_{s a} - s \wedge j^{s a} + s - j_{s a} \leq j_i \leq n \wedge$$

$$l_{i k} - j_{s a}^{i k} + 1 = l_s \wedge l_{s a} + j_{s a}^{i k} - j_{s a} > l_{i k} \wedge l_i + j_{s a} - s = l_{s a} \wedge$$

$$D + j_{s a} - n < l_{s a} \leq D + l_s + j_{s a} - n - 1 \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$

$$f_z^{S^{ISS}}_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{l_{ik}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )}$$

$$\sum_{j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa}}^{l_{ik}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{( )} \sum_{j_i=j^{sa}+l_i-l_{s_3}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{i_s}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{i_s}+j_s+l_{i_s}-\mathbb{k}_1)}^{( )}$$

$$\sum_{(n_{sa}=n_{i_s}-\mathbb{k}_2)}^{( )} \sum_{(n_s=n_{i_s}+j^{sa}-j_i-\mathbb{k}_3)}^{( )}$$

$$\frac{(n_i - n - 1)! \cdot (n + j_s - j_{ik} - s - j_{sa})!}{(n_i - n - 1)! \cdot (n + j_s - j_{ik} - s - j_{sa})!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - \dots + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + \dots \wedge j_s + j_{sa}^{ik} - 1 \leq j_i \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_i \leq j_{sa} - s - j_{sa}^{ik} + s - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$\dots + j_{sa} - \dots < l_{sa} \leq D \wedge l_s + j_{sa} - n - 1 \wedge$

$((D > n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$\dots \wedge \dots - s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_1, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{iss} = \sum_{k=1} (j_s = j_{ik} + l_s - l_{ik}) \sum_{( )}$$

$$\sum_{j_{ik} = l_{sa} + n + j_{sa}^{ik} - D - j_{sa}}^{l_s + j_{sa}^{ik} - 1} \sum_{( )} \sum_{j_i = j_{sa} + l_i - l_{sa}} (j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{i_s}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{i_k}=n_{i_s}+j_s-j_{i_k}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{i_k}+j_{i_k}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_2}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{i_k} - s - I - j_{sa}^s)!}{(n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{i_k} - s - j_{sa}^s)!}$$

$$\frac{(l_s - 1)!}{(l_s - 1)! \cdot (l_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - l_i - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_{i_k} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{i_k} \leq j^{sa} - j_{sa}^{ik} - j_{sa}$

$j_{i_k} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j_i + s - j_{sa} \leq j_{i_k} < n \wedge$

$l_{i_k} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{i_k} = l_{i_k} \wedge l_{sa} + j_{sa} - s = l_s \wedge$

$D + j_{sa} - n < l_{sa} \leq D + j_{sa} - n = l_s \wedge$

$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\}$

$s \geq 7 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \wedge$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 5 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \dots) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{ISS} = \sum_{k=1} \sum_{(j_s = j_{ik} - j_{sa} + 1)}^{( )}$$

$$\sum_{j_{ik} = l_{sa} + n + j_{sa}^{ik} - D - j_{sa}}^{l_s + j_{sa}^{ik} - 1} \sum_{(j_{sa} = j_{ik} + l_{sa} - l_{ik})}^{( )} \sum_{j_i = j_{sa} + l_i - l_{sa}}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_i = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)}^{( )} \sum_{n_s = n_{sa} + j_{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$\sum_{j_s=j_{ik}-j_{sa}^{ik}+1}^{(j_s=j_{ik}-j_{sa}^{ik}+1)} \sum_{j_i=j_{sa}^s+l_i-l_{sa}}^{(j_i=j_{sa}^s+l_i-l_{sa})} \sum_{n_i=n+\mathbb{k}}^{(n_i=n+\mathbb{k})} \sum_{n_{is}=n+\mathbb{k}-j_s+1}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(n_i-j_s+1)} \sum_{n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-\mathbb{k}_2}^{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-\mathbb{k}_2)} \sum_{n_s=n_{sa}+j_{sa}^s-j_i-\mathbb{k}_3}^{(n_s=n_{sa}+j_{sa}^s-j_i-\mathbb{k}_3)}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - \mathbf{n} - I)! \cdot (\mathbf{n} + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > 1 \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa}^s + j_{sa}^{ik} - j_{sa} \wedge$$



$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{ISS} = \sum_{k=1}^{(l_{ik} - j_{sa}^{ik} + 1)} \sum_{j_{ik}=j_s+l_{ik}}^{(n+l_{ik}-j_{sa}^{ik}+1)} \sum_{j_{sa}=j_{sa}^{ik}-j_{sa}}^{(j_{sa}^{ik}-j_{sa}^{ik}+1)} \sum_{j_i=j_{sa}^{ik}+l_i-l_{sa}}^{(n+l_i-l_{sa}-j_{sa}^{ik}+1)} \sum_{n_i=n+l_{ik}}^{(n+l_{ik}-j_s+l_{ik}-1)} \sum_{n_s=n_{sa}+j_{sa}^{ik}-j_i-l_{k_3}}^{(n+l_{ik}-j_s+l_{ik}-1)} \frac{(n+l_{ik}-j_s+l_{ik}-1)! \cdot (n+l_{ik}-j_s+l_{ik}-1)!}{(n_i - n_s - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_i \leq D - n + 1 \wedge$$

$$1 \leq j_{ik} - j_{sa}^{ik} - 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$j_{ik} - 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{iSS} = \sum_{k=1}^{(l_s)} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_s)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s}^{( )} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{( )} \sum_{j_i=j_{sa}+l_i-l_s}^{( )}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-k_1}^{( )}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik})}^{( )} \sum_{(n_s=n_{sa}+j_{sa}^{ik})}^{( )}$$

$$\frac{(n_i + j_s - j_{sa}^{ik} - s - j_{sa}^s)!}{(n_i - n + l)! \cdot (n_{is} + j_{sa}^{ik} - j_{sa}^s)!} \cdot \frac{(l_s - 2)!}{(n_i - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s = D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq n - a + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa}^{ik} \leq j_{sa}^{ik} \leq j_i + j_{sa} - s \wedge j_{sa}^{ik} - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > 0 \wedge l_{sa} + j_{sa}^{ik} - j_{sa}^{ik} \wedge l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa}^{ik} - n < l_{sa} \leq D + l_s + j_{sa}^{ik} - n - 1 \wedge$$

$$(D \geq n < n \wedge l_s = 1 \wedge l_s > 0) \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}^i, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$z = 2 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge l_s = 1 \wedge l_s > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}^i, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 5 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 5 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

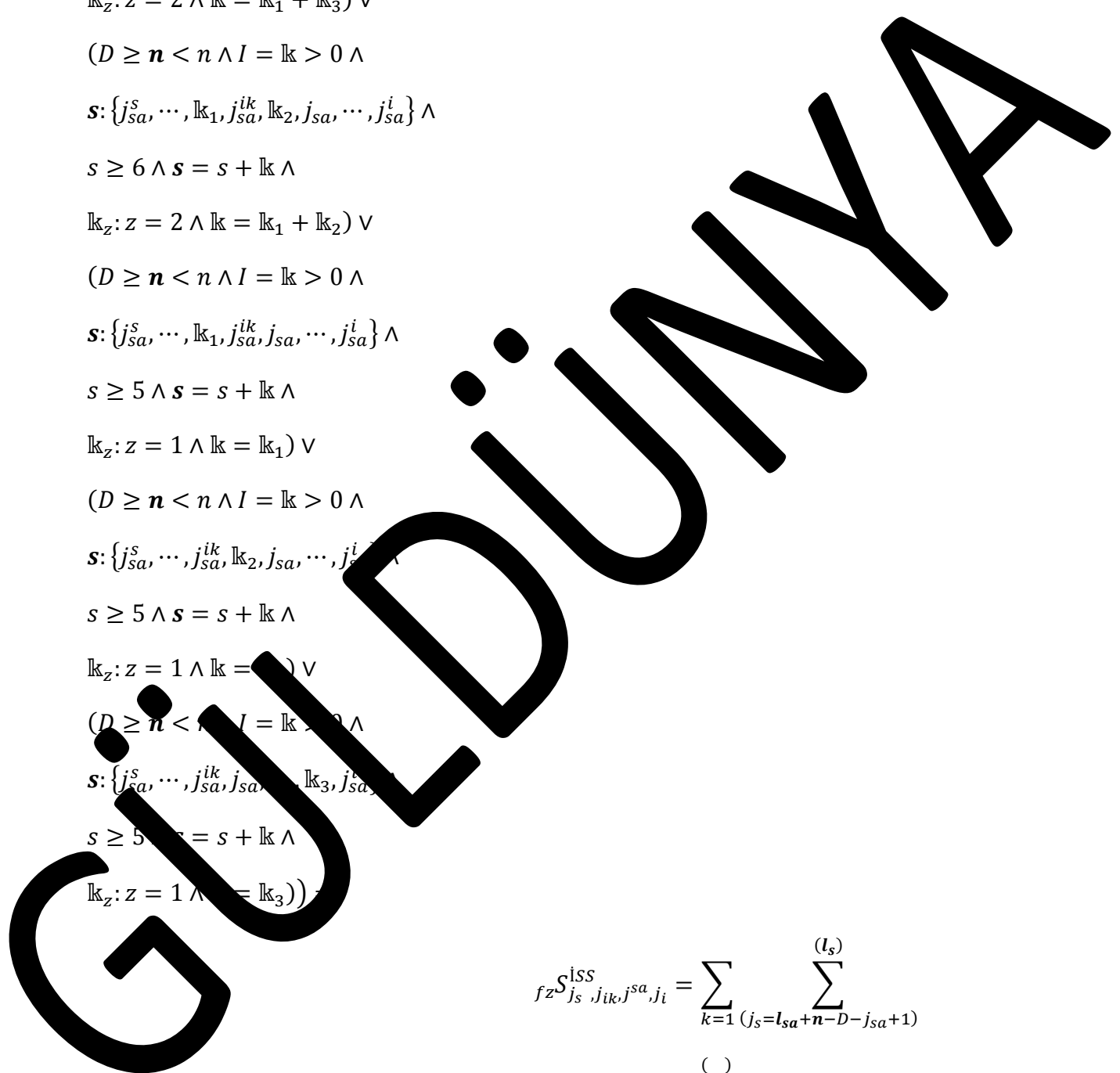
$s \geq 5 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \vee$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{ISS} = \sum_{k=1}^{(l_s)} \sum_{(j_s = l_{sa} + n - D - j_{sa} + 1)}^{(l_s)}$$

$$\sum_{j_{ik} = j_s + j_{sa}^{ik} - 1}^{( )} \sum_{(j_{sa} = j_{ik} + l_{sa} - l_{ik})}^{( )} \sum_{j_i = j_{sa} + l_i - l_{sa}}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$



$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{( )} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_s)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_{ik} < n$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > j_{ik} \wedge l_i + j_{sa} - s = l_s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = (\mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6, s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = (\mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5, s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$j_{sa}^{iss} j_{ik} j_{sa} j_i = \sum_{k=1}^{(l_s)} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_s)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(n)} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(n)} \sum_{j_i=j_{sa}^{ik}+l_i-l_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(n)} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1 \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$



$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$\begin{aligned} & \sum_{j_s=j_{sa}+1}^{n+lk} \sum_{j_{ik}=j_s-j_{sa}+1}^{n+lk-j_s+1} \sum_{j_i=l_{ik}+s+n-D-j_{sa}^{ik}}^{l_s+s-1} \sum_{n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-\mathbb{k}_2}^{n} \sum_{n_s=n_{sa}+j_{sa}^{ik}-j_i-\mathbb{k}_3}^{n} \\ & \frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!} \cdot \\ & \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\ & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \end{aligned}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1 \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 5 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{ISS} = \sum_{k=1} \sum_{(j_s = \dots - j_{sa}^{ik} + 1)}^{(\dots)}$$

$$\sum_{j_{ik} = j_{sa} + l_{ik} - l_{sa}}^{(l_s + j_{sa} - 1)} \sum_{(j_{sa} = l_{ik} + n + j_{sa} - j_{sa}^{ik})}^{(j_{sa}^{ik})} j_i = j_{sa}^s + l_i$$

$$\sum_{n_i = \dots}^n \sum_{(n_{is} = n_{is} + j_{sa} + 1)}^{(i+1)} \sum_{(n_{ik} = \dots)}^{(i - \mathbb{k}_1)}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)}^{(i+1)} \sum_{n_s = n_{sa} + j_{sa} - j_i - \mathbb{k}_3}^{(i)}$$

$$\frac{(n_i + \dots + j_{sa}^{ik})!}{(n_i - \dots - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq \dots \wedge l_s > 1, l_i \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_{sa} - j_{sa}^{ik} + 1 \wedge s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + \dots - j_{sa}^{ik} \leq j_i \leq j_i + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + \dots > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$\dots < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1 \wedge$

$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 7 \wedge s = s + \mathbb{k} \wedge$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\}$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i}^{ISS} = \sum_{k=1}^{(\cdot)} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik} = l_{ik} + n - D}^{l_s + j_{sa}^{ik} - 1} \sum_{(j^{sa} = j_{ik} + l_{sa} - l_{ik})}^{(\cdot)} \sum_{j_i = j^{sa} + l_i - \dots}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} - \dots - j_{ik} - k_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - k_1)}^{(\cdot)} \sum_{(n_s = n_{sa} + j^{sa} - j_i)}$$

$$\frac{(n_i + j_s - \dots - s - j_{sa}^s)!}{(n_i - n - l)! \cdot (n_{is} + j_{sa} - \dots - j_{sa}^s)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq \dots - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq \dots + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + \dots - j_{sa}^{ik} \leq j_i + j_{sa} - s \wedge j_{sa}^{ik} - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > \dots \wedge l_{sa} + \dots - j_{sa}^{ik} \wedge l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + \dots - n < l_{ik} \leq \dots + l_s + j_{sa} - n - 1 \wedge$$

$$(D \geq n < n \wedge I = k > 0) \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{i-1}, j_{sa}^i, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = \dots + k \wedge$$

$$z = \dots (k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\}$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_1, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{ISS} = \sum_{k=1} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_s)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j_{sa}=j_{ik}+l_{sa}-l_{ik})}^{( )} \sum_{j_i=j_{sa}^{ik}+l_i-l_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_2}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - I - j_{sa}^s)!}{(n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - 1)!}{(l_s - 1)! \cdot (l_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - l_i - l_i)! \cdot (n - j_i)}$$

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$$((D \geq n < n \wedge l_s \geq 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i > D + l_{sa} + s - n - j_{sa}) \vee$$

$$(D \geq n < n \wedge l_s \geq 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$l_i > D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \geq 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$l_{ik} > D + l_s + j_{sa}^{ik} - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \geq 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$l_i > D + l_s + s - n - 1) \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 1 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$



$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_1, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \Rightarrow$$

$$fz_{j_s, j_{ik}, j_{sa}, j_i}^{iss} = 0$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

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$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{ISS} = \sum_{(j_s=j_{ik}+1)}^{(j_s=j_{ik}+1)} \sum_{(j_{sa}=j_i+1)}^{(j_{sa}=j_i+1)} \sum_{(j_i=l_i+n-D)}^{(j_i=l_i+n-D)}$$

$$\sum_{(j_{sa}=j_i+1)}^{(j_{sa}=j_i+1)} \sum_{(j_i=l_i+n-D)}^{(j_i=l_i+n-D)} \sum_{(n_i=n+\mathbb{k})}^{(n_i=n+\mathbb{k})} \sum_{(j_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{(j_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}$$

$$\sum_{(n_i=n+\mathbb{k})}^{(n_i=n+\mathbb{k})} \sum_{(j_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{(j_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{(n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3)}^{(n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3)}$$

$$\sum_{(n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3)}^{(n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3)} \sum_{(n_i=n+\mathbb{k})}^{(n_i=n+\mathbb{k})} \sum_{(j_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{(j_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}$$

$$\frac{(n_i - n + \mathbb{k} - 1)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - n + \mathbb{k} - 1)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$j_{sa}^{ik} - 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \Rightarrow$$

$$f_z S_{j_s, j_{ik}}^{iSS} j_i = \sum_{k=1}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}-k-j_{sa}}^{(\cdot)} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\cdot)} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^n$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{(\cdot)} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3}$$

$$\frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$\begin{aligned} S_{j_s, j_{ik}}^{ISS} &= \sum_{k=1}^{\binom{()}{j_s=j_{ik}-j_{sa}^{ik}+1}} \\ &= \sum_{j_{sa}=j_s}^n \sum_{j_{sa}=j_s}^n (j_{sa}=j_s) \sum_{j_i=l_{ik}+n+s-D-j_{sa}^{ik}}^n \\ &= \sum_{j_{sa}=j_s}^n \sum_{j_{sa}=j_s}^n \sum_{n+\mathbb{k} (n_{is}=n+\mathbb{k}-j_s+1)}^n \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\ &= \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-\mathbb{k}_2)}^{\binom{()}{n_s=n_{sa}+j_{sa}^{ik}-j_i-\mathbb{k}_3}} \sum_{(l_s-2)!} \\ &= \frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!} \cdot \\ &= \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\ &= \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \end{aligned}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$



$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{iss} = \sum_{k=1}^{\binom{()}{j_s=j_{ik}-j_{sa}^{ik}+}} \sum_{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}^{\binom{()}{j_{sa}=j_i+j_{sa}}} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{sa}=n_{ik}-j_{sa}-\mathbb{k}_2)}^{(n_{sa}=n_{ik}-j_{sa}-\mathbb{k}_2)} \sum_{(n_{sa}+j_{sa}-j_i-\mathbb{k}_3)}^{(n_{sa}+j_{sa}-j_i-\mathbb{k}_3)} \frac{(j_s + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - 1)!}{(n_{sa} - n_{ik} + 1)! \cdot (n_{sa} + j_{sa} - j_s - s - j_{sa}^{ik})!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1) \wedge$$

$$2 \leq j_{sa} \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_{sa} \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\}$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i}^{iss} = \sum_{k=1}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{lk}-j_{sa}}^{(n+j_{sa}-s)} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)}^{(n+j_{sa}-s)} \sum_{j_i=j^{sa}+s-j_{sa}}^{(n+j_{sa}-s)}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-k_1}^{(n_i-j_s+1)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_1)}^{(\cdot)} \sum_{(n_{sa}=n_{sa}+j^{sa}-j_i)}^{(\cdot)}$$

$$\frac{(n_i + j_{ik} - j_{sa} - s - j_{ik} - 1)!}{(n_i - n + 1)! \cdot (n_{ik} + j_{sa} - j_{sa} - j_{ik})!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{lk} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{lk} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{lk} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{lk} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{lk} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{lk} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz^s_{j_s} j_{ik} j_{sa}^{i_s} = \sum_{k=1}^{\mathbb{k}} (j_s = j_{ik} + \dots + 1)$$

$$\sum_{j_{ik} = \dots}^{\dots} \sum_{j_{sa}^{ik} = j_{sa} - j_{sa}}^{\dots} \sum_{j_{sa} = l_{sa} + n}^{\dots} \sum_{j_s = j_{sa}}^{\dots}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n_{is} + j_s + 1)}^{\dots} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}^{\dots}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)}^{\dots} \sum_{n_s = n_{sa} + j_{sa} - j_i - \mathbb{k}_3}^{\dots}$$

$$\frac{(n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D > n < n \wedge l_s = \dots - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$



$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 5 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{ISS} = \sum_{k=1} \sum_{(j_s = \dots - j_{sa}^{ik} + 1)}^{( )}$$

$$\sum_{j_{ik} = j_{sa} + j_{sa}^{ik} - j_{sa}}^{(n + j_{sa} - s)} \sum_{(j_{sa} = l_{ik} + n + j_{sa} - j_{sa}^{ik})}^{( )} j_i = j_{sa} + s$$

$$\sum_{n_i = \dots}^n (n_{is} = n_{is} + 1) n_{ik} = n_{ik} - \mathbb{k}_1$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - \mathbb{k}_2)}^{( )} n_s = n_{sa} + j_{sa} - j_i - \mathbb{k}_3$$

$$\frac{(n_i + \dots + j_s - s - j_{sa}^{ik} - I)!}{(n_i - I)! \cdot (n + j_{ik} + j_{sa} - j_s - s - j_{sa}^{ik})!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq \dots \wedge l_s > D \dots n + 1 \wedge$

$z \leq j_s \leq j_s - j_{sa}^{ik} + 1 \wedge s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + \dots - j_{sa}^{ik} \leq j_i \leq j_i + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + \dots = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$D > \dots \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 7 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{iss} = \sum_{k=1}^{\binom{()}{j_s=j_{ik}-j_{sa}^{ik}+1}} \sum_{\binom{()}{j_s=j_{ik}-j_{sa}^{ik}+1}}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(n+j_{sa}-s)}^{(n+j_{sa}-s)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{()} \sum_{(n_s=n_{sa}+j_s-j_i-l_{k_3})}^{()}$$

$$\frac{(n_i + j_{ik} + j_{sa}^s - j_s - j_{sa}^{ik} - j_{sa})!}{(n_i - n - l)! \cdot (n + j_{ik} + j_{sa}^s - j_s - j_{sa}^{ik})!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s - 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_s - 1)!}{(D + j_{sa} - n - l_i)! \cdot (n - j_i)!}$$

$(D \geq n < n \wedge l_s > D - n + 1 \wedge$   
 $2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$   
 $j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$   
 $l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$   
 $(D \geq n < n \wedge l_s > D - n + 1 \wedge$   
 $2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$   
 $j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$   
 $l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$   
 $(D \geq n < n \wedge l_s > D - n + 1 \wedge$   
 $2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$   
 $j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$   
 $l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$   
 $(D \geq n < n \wedge l_s > D - n + 1 \wedge$   
 $2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$   
 $j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

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$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

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$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_2: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_2: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3))$$

$$fz S_{j_s, j_{ik}, j_{sa}, j_i}^{iss} = \sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{( )}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{lk}-D-s}^{n+j_{sa}^{ik}-s} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{lk})}^{( )} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}$$



$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{( )} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_s)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

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$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i}^{ISS} = \sum_{k=1}^{( )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa}}^{n+j_{sa}^{ik}-s} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{( )} \sum_{j_i=j^{sa}+s-}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{( )} \sum_{(n_{sa}+j^{sa}-j_i)}$$

$$\frac{(n_i + j_{ik} + j_{sa} - s - j_{sa}^{ik} - I)!}{(n_i - n + I)! \cdot (n_{ik} + j_{sa} - j_{sa}^{ik})!}$$

$$(l_s - 2)!$$

$$(l_s - j_s)! \cdot (j_s - 2)!$$

$$(D - l_i)!$$

$$(D - j_i - n - l_i)! \cdot (n - j_i)!$$

$$((D \geq n < n \wedge l_s > D - n - 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} + j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} + j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \wedge$$

$$(l_{sa} < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$



$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{iss} = \sum_{k=1} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{( )}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{n+j_{sa}^{ik}-s} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-l_{k_2})} \sum_{n_s=n_{sa}+j_{sa}-j_i-l_{k_3}}$$

$$\frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{ik} - l_{k_2})!}{(n_i - n - l)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{ik} - l_{k_2})!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_{ik} + n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{ik} \leq j_{sa}^{ik} + j_{ik} \leq j_{sa}^{ik} + j_{sa} - j_{sa}^{ik} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - s \wedge j_{sa} + j_{sa} - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_{sa} + j_{sa} - s = l_{sa} \wedge$$

$$((D - l_i) < n \wedge l_i = l_{ik} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, l_{k_2}, j_{sa}, \dots, l_{k_3}, j_{sa}^i\}$$

$$s \geq 6 \wedge s = s + l_k \wedge$$

$$l_{k_z}: z = 2 \wedge l_k = l_{k_1} + l_{k_2} + l_{k_3}) \vee$$

$$(D \geq n < n \wedge l_i = l_{ik} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, j_{sa}, \dots, l_{k_3}, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + l_k \wedge$$

$$l_{k_z}: z = 2 \wedge l_k = l_{k_2} + l_{k_3}) \vee$$

$$(D \geq n < n \wedge l_i = l_{ik} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, j_{sa}, \dots, l_{k_3}, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + l_k \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

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$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\}$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \vee$$

$$fz S_{j_s, j_{ik}, j_{sa}, j_i}^{iss} = \sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{( )}$$

$$\sum_{j_{ik}=l_s+n+j_{sa}^{ik}-D-1}^{n+j_{sa}^{ik}-s} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{( )} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{( )} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - 1)!}{(n_i - n - 1)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - l_i)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i < n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

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$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_1, j_{sa}, \dots, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

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$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

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$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{ISS} = \sum_{k=1}^{(n-s+1)} \sum_{(j_s=l_i+n-D-s+1)}^{(n-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{( )} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{( )} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{( )} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \wedge$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \Rightarrow$$

$$f_z S_{j_s^{iss} j_{ik} j_{sa} j_i} = \sum_{k=1}^{(n-s+1)} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-k_2)}^{( )} \sum_{n_s=n_{sa}+j_{sa}-j_i-k_3}$$



$$\frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - l_i)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa})) \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{iSS} = \sum_{k=1}^{(n-s+1)} \sum_{(j_s = l_{ik} + n - D - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik} = j_s + j_{sa}^{ik} - 1} \sum_{(j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})} \sum_{j_i = j_{sa} + s - j_{sa}}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - k_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - k_2)}^{( )} \sum_{n_s = n_{sa} + j_{sa} - j_i - k_3}$$

$$\frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z^{i s} S_{j_s, j_{sa}, j_i} = \sum_{k=1}^{(n-s+1)} \sum_{(j_s=l_s+n-D)}^{(n-s+1)}$$

$$\sum_{j_{ik}=\dots}^{(n-s+1)} \sum_{j_{sa}^{ik}-1}^{(n-s+1)} (j_{sa}^{ik}-1) \sum_{j_i=j_{sa}^{ik}+s-j_{sa}}^{(n-s+1)}$$

$$\sum_{n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(j_s+1)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(n-s+1)} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}^{(n-s+1)}$$

$$\frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i}^{ISS} = \sum_{k=1}^{( )} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{( )} \sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}}^{( )} \sum_{(j^{sa} = j_i + j_{sa})}^{( )} \sum_{j_i = s+1}^{l_i} \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{(j_{ik} = n_{is} + j_s - j_i)}^{(n_i - j_s + 1)} \frac{(n_i + j_{ik} - j_{sa}^s - j_s - j_{sa}^{ik} - I)!}{(n_i - I)! \cdot (n_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\begin{aligned} & ((D \geq n < n \wedge l_s > l_s \leq D - n + 1) \wedge (D > n < n \wedge l_s > l_s \leq D - n + 1) \wedge (D > n < n \wedge l_s > l_s \leq D - n + 1)) \wedge \\ & 1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee \\ & (D > n < n \wedge l_s > l_s \leq D - n + 1) \wedge (D > n < n \wedge l_s > l_s \leq D - n + 1) \wedge \\ & 1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \wedge \end{aligned}$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{ISS} = \sum_{k=1}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+j_{sa}^{ik}-j_{sa}}^{(\cdot)} \sum_{(j_{sa}=j_i+j_{sa}-s)}^{(\cdot)} \sum_{j_i=s+1}^{l_{sa}+j_{sa}-s}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-k_1)}^{(\cdot)} \sum_{(n_{sa}=n_{sa}+j_{sa}-j_i)}$$

$$\frac{(n_i + j_{ik} - j_{sa} - s - j_{ik} - 1)!}{(n_i - 1)! \cdot (n_{ik} + j_{sa} - j_{sa} - j_{ik})!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$



$$(D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = \mathbf{s} + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq \mathbf{n} < \mathbf{n} \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = \mathbf{s} + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz^s_{j_s} j_{ik} j_{sa}^i = \sum_{k=1}^{\mathbb{k}} \sum_{(j_s=j_{ik}+1)}^{(j_s=j_{ik}+1)} \sum_{(j_{sa}=j_i+j_s)}^{(j_{sa}=j_i+j_s)} \sum_{(j_{sa}=j_i+j_s)}^{(j_{sa}=j_i+j_s)} \sum_{(l_{ik}+j_{sa}^i-s)}^{(l_{ik}+j_{sa}^i-s)} \sum_{(n_{is}=n_{is}+j_s+1)}^{(n_{is}=n_{is}+j_s+1)} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)} \sum_{(n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3)}^{(n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3)} \frac{(n_{sa}+j_{ik}+j_{sa}^i-j_s-s-j_{sa}^{ik}-I)!}{(n_{sa}-I)! \cdot (n_{sa}+j_{ik}+j_{sa}^i-j_s-s-j_{sa}^{ik})!} \cdot \frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!} \cdot \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!}$$

$$((D > \mathbf{n} \wedge l_s > 1 \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq \mathbf{n} < \mathbf{n} \wedge l_s > 1 \wedge l_i \leq D + s - \mathbf{n} \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$



$$(D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$l_i \leq D + s - n) \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz \sum_{j_s, j_{ik}, j^{sa}, j_i}^{l_{ss}} \sum_{k=1}^{\infty} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)} \sum_{j_{ik} = j_s + j_{sa}^{ik} - j_{sa}} \sum_{l = j_i + j_{sa} - s}^{l_s + s - 1} \sum_{j_i = s + 1}^{l_s + s - 1} \sum_{n_i = 1}^n \sum_{(n_{is} = n_i + j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = n_{sa} + j^{sa} - j_i - \mathbb{k}_3} \frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i}^{iss} = \sum_{k=1}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()} \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(l_i+j_{sa}-s)} \sum_{(j^{sa}=j_{sa}+1)}^{(l_i+j_{sa}-s)} \sum_{j_i=j^{sa}+s-j_{sa}}^{(l_i+j_{sa}-s)} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{sa}+s-j_{sa}}^{(n_i-j_s+1)} \sum_{n_{sa}=n_{ik}-j_{sa}}^{(n_i-j_s+1)} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}^{(n_i-j_s+1)} \frac{(n_i - n - l)! \cdot (n + j_{ik} - j^{sa} - j_s - s - j_{sa}^{ik})!}{(n_i - n - l)! \cdot (n + j_{ik} - j^{sa} - j_s - s - j_{sa}^{ik})!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$((D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge 1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee ((D \geq n < n \wedge l_s > 1 \wedge l_s \leq D + s - n \wedge 1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa})) \wedge$

$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge s \geq 7 \wedge s = s + \mathbb{k} \wedge$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\}$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$



$$fz_s^{ISS} j_{ik,j^{sa},j_i} = \sum_{k=1}^{(\quad)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{lk}-j_{sa}}^{(l_{sa})} \sum_{(j^{sa}=j_{sa}+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{(l_{sa})}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-k_1}^{(n_i-j_s+1)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_1)}^{(\quad)} \sum_{(n_{sa}=n_{sa}+j^{sa}-j_i)}^{(\quad)}$$

$$\frac{(n_i + j_{ik} - j^{sa} - s - j_{sa}^{ik} - 1)!}{(n_i - n + 1)! \cdot (n_{ik} + j_{sa}^{lk} - j_{sa} - j_{sa}^{ik})!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{lk} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{lk} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{lk} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{lk} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{lk} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{lk} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{lk} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{lk} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{lk} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz S_{j_s}^{iss} j_{ik} j_{sa}^i = \sum_{k=1}^{\mathbb{k}} (j_s = j_{ik} + \dots + 1)$$

$$\sum_{j_{ik} + j_{sa} + j_{sa}^{ik} - j_s}^{(l_{ik} + j_{sa}^i)}$$

$$\sum_{n_{is} = n + \mathbb{k}}^n (n_{is} = n + j_s + 1) \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2} (n_s = n_{sa} + j_{sa}^i - j_i - \mathbb{k}_3)$$

$$\frac{(n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$l_i \leq D + s - n) \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D > n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz^s \sum_{j_s, j_{ik}, j^{sa}, j_i}^{l_{ss}} \sum_{k=1}^{(j_s=j_{ik}-j_{sa}^{ik}+1)} \sum_{(l_s=j_s)}^{(l_s=j_s)} \sum_{j_{ik}=j_{sa}^{ik}-j_{sa}}^{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j_i=j_{sa}^{ik}+s-j_{sa}}^{(j_i=j_{sa}^{ik}+1)} \sum_{n_i=j_{sa}^{ik}}^{(n_i=j_{sa}^{ik}+1)} \sum_{n_{ik}=n_{is}+j_s-1}^{(n_{ik}=n_{is}+j_s+1)} \sum_{n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}^{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}^{(n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3)} \frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$(\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i}^{iSS} = \sum_{k=1}^{(\quad)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_i+j_{sa}^{ik}-s} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\quad)} \sum_{j_i=j^{sa}+s-j_{sa}}^{(\quad)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_i+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=j_i-\mathbb{k}_1}^{(\quad)} \sum_{(n_{sa}=n_{ik}-j_s)}^{(\quad)} \sum_{n_s=n_{sa}-j_i-\mathbb{k}_3}^{(\quad)}$$

$$\frac{(n_i + j_{sa}^{ik} - s - j_{sa})!}{(n_i - n - I)! \cdot (n + j_{ik} - j_{sa}^{ik} - j_s - s - j_{sa}^{ik})!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge 1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_s \leq D + s - n \wedge 1 \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa})) \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$



$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i}^{iss} = \sum_{k=1}^{( )} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik} = j_{sa}^{ik} + 1}^{l_{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}^{( )} \sum_{j_i = j^{sa} + s - 1}$$

$$\sum_{n_i = n + l_k}^n \sum_{(n_{is} = n + l_k - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_{ik} - l_{k1}}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - l_{k2})}^{( )} \sum_{(n_{sa} = j^{sa} - j_i)}$$

$$\frac{(n_i + j_{ik} - j_{sa}^{ik} - s - j_{sa}^{ik} - I)!}{(n_i - n + l_k)! \cdot (n_{ik} + j_{sa}^{ik} - j_{sa}^{ik})!}$$

$$(l_s - 2)!$$

$$(l_s - j_s)! \cdot (j_s - 2)!$$

$$(D - l_i)!$$

$$(D - j_i - n - l_i)! \cdot (n - j_i)!$$

$$((D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz_{j_s}^{i s s} j_{i k} j_{s a}^{i s} = \sum_{k=1}^{\mathbb{k}} \binom{()}{(j_s=j_{i k}+1)}$$

$$\sum_{j_{s a}^{i k}+1}^{l_{i k}} \binom{()}{(j_{s a}^{i k}+j_{s a}-j_{s a})} \sum_{k=s-j_{s a}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \binom{(n_i-j_s+1)}{(n_{i s}=n_{i s}+j_s+1)} \sum_{n_{i k}=n_{i s}+j_s-j_{i k}-\mathbb{k}_1}$$

$$\binom{()}{(n_{s a}=n_{i k}+j_{i k}-j_{s a}-\mathbb{k}_2)} \sum_{n_s=n_{s a}+j_{s a}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i+j_{i k}+j_{s a}^s-j_s-s-j_{s a}^{i k}-I)!}{(n_i-I)! \cdot (n+j_{i k}+j_{s a}^s-j_s-s-j_{s a}^{i k})!}$$

$$\frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!}$$

$$\frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!}$$

$$((D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{i k} - j_{s a}^{i k} + 1 \wedge j_s + j_{s a}^{i k} - 1 \leq j_{i k} \leq j^{s a} + j_{s a}^{i k} - j_{s a} \wedge$$

$$j_{s a}^{i k} \leq j^{s a} \leq j_i + j_{s a} - s \wedge j^{s a} + s - j_{s a} \leq j_i \leq n \wedge$$

$$l_{i k} - j_{s a}^{i k} + 1 = l_s \wedge l_{s a} + j_{s a}^{i k} - j_{s a} = l_{i k} \wedge l_i + j_{s a} - s = l_{s a}) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{i k} - j_{s a}^{i k} + 1 \wedge j_s + j_{s a}^{i k} - 1 \leq j_{i k} \leq j^{s a} + j_{s a}^{i k} - j_{s a} \wedge$$



$$(D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$l_i \leq D + s - n) \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz \sum_{j_s, j_{ik}, j^{sa}, j_i}^{lss} \sum_{k=1}^{\infty} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$l_{sa}^{ik}-1 \sum_{j_{ik}=j_{sa}^{ik}+1}^{(j_{sa}=j_{ik}+j_{sa}^{ik})} \sum_{j_i=j_{sa}^{ik}+s-j_{sa}}$$

$$\sum_{n_i=1}^n \sum_{(n_{is}=n_{is}-j_s+1)}^{(n_i+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}^{(j_{sa}^{ik})} \sum_{n_s=n_{sa}+j_{sa}^{ik}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$



$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$

$$f_z^{S_{j_s, j_{ik}, j^{sa}, j_i}} = \sum_{k=1}^{(l_i-s+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(n)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(n_i-j_s+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{(n_i-j_s+1)} \dots$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \dots$$

$$\sum_{(n_{sa}=n_{is}-\mathbb{k}_2)}^{(n_{is}-\mathbb{k}_1)} \sum_{n_s=j^{sa}-j_i-\mathbb{k}_3}^{(n_{is}-\mathbb{k}_1)} \dots$$

$$\frac{(n_i - j_{ik} + j_{sa}^{ik} - j_s - s - j_{sa}^{ik})!}{(n_i - n - 1)! \cdot (n + j_{ik} - j_{sa}^{ik} - j_s - s - j_{sa}^{ik})!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$((D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$

$(D \geq n < n \wedge l_s > 1 \wedge l_s \leq D + s - n \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa})) \wedge$

$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 7 \wedge s = s + \mathbb{k} \wedge$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\}$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz_{j_s, j_{ik}, j^{sa}, j_i}^{ISS} = \sum_{k=1}^{(l_{sa}-j_{sa}+1)} \sum_{(j_s=2)}^{(l_{sa}-j_{sa}+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{( )} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{( )} \sum_{j_i=j^{sa}+s-j_{sa}^{ik}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-l_{k1}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k1})}^{( )} \sum_{(n_s=n_{sa}+j^{sa}-j_i)}$$

$$\frac{(n_i + j_{ik} - j^{sa} - l_{k1} - s - j_{sa}^{ik} - l_{k1})!}{(n_i - n + l_k)! \cdot (n_{is} - j_s + 1)! \cdot (n_{ik} + j_{ik} - j^{sa} - l_{k1} - j_i - j_{sa}^{ik})!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz S_{j_s, j_{ik}, j_{sa}, j_i}^{iss} = \sum_{k=1}^{\mathbb{k}-j_{sa}^{ik}+1} \sum_{l=2}^{\mathbb{k}-j_{sa}^{ik}+1}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}} \sum_{j_{ik}+j_{sa}-j_{sa}^{ik}} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}} \sum_{n+\mathbb{k}-j_s+1} \sum_{j_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{is}+j_s-j_{ik}-\mathbb{k}_2)} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n + \mathbb{k} + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - n + \mathbb{k} - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > 1) \wedge s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$j_{sa}^{ik} - 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$l_i \leq D + s - n) \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z S^{l_s} j_{ik} j_{sa}^{s-1} \sum_{k=2}^{(l_s)} \sum_{j_s=1}^{(n-j_s+1)} \sum_{j_{ik}=j_{sa}-1}^{(n-j_s+1)} \sum_{n_i=n+\mathbb{k}}^{(n-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(n-j_s+1)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(n-j_s+1)} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}^{(n-j_s+1)} \frac{(n+j_{ik}+j_{sa}^s-j_s-s-j_{sa}^{ik}-I)!}{(n_i-j_s+1-I)! \cdot (n+j_{ik}+j_{sa}^s-j_s-s-j_{sa}^{ik})!} \cdot \frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!} \cdot \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{sa} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{sa} + j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$



$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \Rightarrow$$

$$f_z^{S_{j_s, j_{ik}, j^{sa}, j_i}} = \sum_{k=1}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)} \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\cdot)} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\cdot)} \sum_{j_i=l_i+n-l}^{l_{sa}+s-j_{sa}} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k-l}^{(n_{is}-l)} \sum_{(n_{sa}=n_{ik}-l)}^{(n_s=n_{ik}+j^{sa}-j_i-k_3)} \frac{(n_i+n_{ik}+j_{sa}^{ik}-s-j_{sa})!}{(n_i-n-l)! \cdot (n+n_{ik}-j_s-s-j_{sa}^{ik})!} \cdot \frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!} \cdot \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!}$$

$$((D \geq n < n \wedge l_i > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_i \leq j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D > n \leq n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_i \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1)) \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz S_{j_s}^{i s s} j_{i k} j_{s a}^{i s} = \sum_{k=1}^{\infty} (j_s = j_{i k} + 1)$$

$$\sum_{j_{i k} = n + \mathbb{k}}^n \sum_{(n_{i s} = n - j_s + 1)}^{(n_i - j_s + 1)} \sum_{(n_{s a} = n_{i k} + j_{i k} - j_{s a} - \mathbb{k}_2)}^{(l_{i k} + s - j_{s a}^{i k})} \sum_{(n_s = n_{s a} + j_{s a} - j_i - \mathbb{k}_3)}^{(n_{i k} = n_{i s} + j_s - j_{i k} - \mathbb{k}_1)}$$

$$\frac{(n + j_{i k} + j_{s a}^s - j_s - s - j_{s a}^{i k} - I)!}{(n - I)! \cdot (n + j_{i k} + j_{s a}^s - j_s - s - j_{s a}^{i k})!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i + j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1)) \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(n_i-j_s+1)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}^{(n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(j_s=j_{ik}-j_{sa}^{ik}+1)} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(j^{sa}=j_i+j_{sa}-s)} \sum_{j_i=l_i+n-D}^{l_s+s-1} f z^s j_{sa}^s j_{sa}^{ik} j_{sa}^i$$

$$\frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$



$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{ISS} = \sum_{(j_s=j_{ik}+j_{sa}^{ik}+1)}^{( )}$$

$$\sum_{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}^{( )} \sum_{(n+j_{sa}-D)}^{( )} \sum_{(i=j_{sa}+s-j_{sa})}^{( )}$$

$$\sum_{(n_i=n+\mathbb{k})}^{( )} \sum_{(n+\mathbb{k}-j_s)}^{( )} \sum_{(j_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{( )}$$

$$\sum_{(n_i=n_{ik}+j_{sa}^{ik}-\mathbb{k}_2)}^{( )} \sum_{(n_s=n_{sa}+j_{sa}^{ik}-j_i-\mathbb{k}_3)}^{( )}$$

$$\frac{(n_i - n + \mathbb{k} - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - n + \mathbb{k} - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$j_{sa}^{ik} - 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1)) \wedge$$

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$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

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$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

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$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

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$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz^s \sum_{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)} \sum_{(l_{ik} = a - j_{sa}^{ik})} \sum_{j_{ik} = j_{sa}^{ik} - j_{sa} (j_{sa} = l_i + n + j_{sa} - D - s)} \sum_{j_i = j_{sa} + s - j_{sa}} \sum_{n_i = n + \mathbb{k} (n_{is} = n + \mathbb{k} - j_s + 1)} \sum_{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)} \sum_{n_s = n_{sa} + j_{sa} - j_i - \mathbb{k}_3} \frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

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$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = (\mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = (\mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = \mathbf{s} + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = \mathbf{s} + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = \mathbf{s} + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = \mathbf{s} + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{ISS} = \sum_{k=1}^{(\cdot)} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik} = j_{sa} + j_{sa}^{ik} - j_{sa}}^{(l_s + j_{sa} - 1)} \sum_{(j_{sa} = l_i + \mathbf{n} + j_{sa} - D - s)} \sum_{j_i = j_{sa} + s - j_{sa}}$$

$$\sum_{n_i = \mathbf{n} + \mathbb{k}}^n \sum_{(n_{is} = \mathbf{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)}^{(\cdot)} \sum_{n_s = n_{sa} + j_{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - \mathbf{n} - I)! \cdot (\mathbf{n} + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

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$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

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$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$\begin{aligned} & \sum_{j_{ik} = n + j_{sa}^{ik} - D - s}^{l_{sa} + j_{sa}^{ik} - j_{sa}} \sum_{j_i = j_{sa}^s + s - j_{sa}}^{j_{sa} + j_{sa}^{ik} - j_{sa}} \sum_{n_{is} = n + \mathbb{k} - j_s + 1}^{n_{is} = n + \mathbb{k} - j_s + 1} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}^{(n_i - 1)} \\ & \sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)}^{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)} \sum_{n_s = n_{sa} + j_{sa} - j_i - \mathbb{k}_3}^{(n_s = n_{sa} + j_{sa} - j_i - \mathbb{k}_3)} \\ & \frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!} \\ & \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \\ & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \end{aligned}$$

$$(n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa}^s + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa}^s \leq j_i + j_{sa} - s \wedge j_{sa}^s + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$



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$$(D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

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$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

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$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

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$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

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$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

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$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_{z \mathcal{D}}^{S_{j_s^s, j_{ik}, j_{sa}, j_i}} = \sum_{k=1}^{\binom{()}{j_s=j_{ik}-j_{sa}^{ik}+1}}$$

$$\sum_{i_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{\binom{()}{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{\binom{()}{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}}$$

$$\frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

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$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

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$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

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$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

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$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

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$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \wedge$$

$$((D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}^i, \dots, j_{sa}^i\} \wedge$$

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$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

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$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\}$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \vee$$

$$fz S_{j_s, j_{ik}, j_{sa}, j_i}^{iss} = \sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{( )}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-1} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{( )} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_i=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{( )} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!}$$

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$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$\begin{aligned}
 & \sum_{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}}^{(l_{sa}-j_{sa}+1)} = \sum_{k=1} \sum_{(j_s=l_i+n-D-s+1)} \\
 & \sum_{j_s=j_s+j_{sa}^{ik}-1} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j_{sa}^s+j_{sa}} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{( )} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3} \\
 & \frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!} \cdot \\
 & \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

$$((D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1)) \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k}$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$



$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\}$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \vee$$

$$fz S_{j_s, j_{ik}, j_{sa}, j_i}^{iss} = \sum_{k=1}^{(l_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=l_i+n-D-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{( )} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - 1)!}{(n_i - n - 1)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - l_i)!}$$

$$((D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0) \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$(\mathbb{k}_2 \leq s \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\}$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{iss} = \sum_{k=1} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{i_s}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{i_s}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_2}$$

$$\frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!}$$

$$\frac{(l_s - 1)!}{(l_s - 1)! \cdot (l_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - l_i - l_i)! \cdot (n - j_i)}$$

$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} - j_{sa}^{ik} - j_{sa}$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j_i + s - j_{sa} \leq j_i - n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_i \geq l_{ik} \wedge l_{sa} - j_{sa} - s = \mathbb{k} \wedge$

$D + j_{sa} - n < l_{sa} \leq D + j_{sa} - n - \mathbb{k} \wedge$

$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\}$

$s \geq 7 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \wedge$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{ISS} = \sum_{k=1} \sum_{(j_s = j_{ik} - j_{sa} + 1)}^{( )}$$

$$\sum_{j_{ik} = j_{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j_{sa} = j_i + j_{sa} - s)}^{( )} \sum_{j_i = l_{sa} + n + s - D - j_{sa}}^{l_{ik} + s - j_{sa}^{ik}}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - k_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - k_2)}^{( )} \sum_{n_s = n_{sa} + j_{sa} - j_i - k_3}$$

$$\frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_1, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \vee$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{ISS} = \sum_{k=1} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{( )}$$

$$\sum_{j_{ik} = j_{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j_{sa} = j_i + j_{sa} - s)}^{( )} \sum_{j_i = l_{sa} + n + s - D - j_{sa}}^{l_s + s - 1}$$

$$\sum_{n_i = n + k}^n \sum_{(n_i = n + k - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - k_1}$$



$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{( )} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3} (n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)! / ((n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!)$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_s)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_{ik} < n$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > j_{ik} \wedge l_i + j_{sa} - s = l_s \wedge$

$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$

$((D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 7 \wedge s = s + k \wedge$

$k_z: z = 3 \wedge k = (k_1 + k_2 + k_3) \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 6, s = s + k \wedge$

$k_z: z = 2 \wedge k = (k_2 + k_3) \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 5, s = s + k \wedge$

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$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{ISS} = \sum_{k=1}^{(\cdot)} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\cdot)}$$

$$\sum_{j_{ik} = j_{sa} + j_{sa}^{ik} - j_{sa}}^{(\mathbb{l}_{ik} + j_{sa} - j_{sa}^{ik})} \sum_{(j_{sa} = \mathbb{l}_{sa} + \mathbf{n} - D)} \sum_{j_i = j_{sa} + s - j_{sa}}$$

$$\sum_{n_i = \mathbf{n} + \mathbb{k}}^n \sum_{(n_{is} = \mathbf{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)}^{(\cdot)} \sum_{n_s = n_{sa} + j_{sa} - j_i - \mathbb{k}_3}^{(\cdot)}$$

$$\frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - \mathbf{n} - I)! \cdot (\mathbf{n} + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!}$$

$$\frac{(\mathbb{l}_s - 2)!}{(\mathbb{l}_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$((D \geq n < n \wedge l_s = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^{ik}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^{ik}, \dots, \mathbb{k}_3, j_{sa}^{ik}\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge l_s = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^{ik}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^{ik}, \dots, \mathbb{k}_3, j_{sa}^{ik}\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge l_s = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

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$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

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$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{iss} = \sum_{k=1}^{\binom{()}{j_s=j_{ik}-j_{sa}^{ik}+1}}$$

$$\sum_{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}^{\binom{(l_s+j_{sa}-1)}{j_{sa}=l_{sa}+n-D}} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_i-j_s+1)}^{\binom{(n_i-j_s+1)}{n_{is}=n+k-j_s+1}} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3} (n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)! / ((n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!)$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_s)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_{ik} < n$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > j_{ik} \wedge l_i + j_s - s = l_s \wedge$

$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$

$((D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 7 \wedge s = s + k \wedge$

$k_z: z = 3 \wedge k = (k_1 + k_2 + k_3) \vee$

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$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = \mathbf{s} + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

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$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{ISS} = \sum_{k=1}^{(\cdot)} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\cdot)}$$

$$\sum_{j_{ik} = l_{sa} + \mathbf{n} + j_{sa}^{ik} - D - j_{sa}}^{l_{ik}} \sum_{(j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}^{(\cdot)} \sum_{j_i = j_{sa} + s - j_{sa}}$$

$$\sum_{n_i = \mathbf{n} + \mathbb{k}}^n \sum_{(n_{is} = \mathbf{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)}^{(\cdot)} \sum_{n_s = n_{sa} + j_{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - \mathbf{n} - I)! \cdot (\mathbf{n} + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

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$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

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$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^{ik}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^{ik}, \dots, \mathbb{k}_3, j_{sa}^{ik}\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

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$$s: \{j_{sa}^{ik}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^{ik}, \dots, \mathbb{k}_3, j_{sa}^{ik}\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

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$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

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$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \vee$$

$$fz S_{j_s, j_{ik}, j_{sa}, j_i}^{iss} = \sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{( )}$$

$$\sum_{j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa}}^{l_s+j_{sa}^{ik}-1} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{( )} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_i=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_i+j_s-j_{ik}-k_1}$$



$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{( )} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3} (n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)! / ((n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!)$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_s)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_{ik} < n$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > j_{ik} \wedge l_i + j_{sa} - s = l_s \wedge$

$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$

$((D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 7 \wedge s = s + k \wedge$

$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 6, s = s + k \wedge$

$k_z: z = 2 \wedge k = k_2 + k_3) \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 5, s = s + k \wedge$

$k_z: z = 2 \wedge k = k_1 + k_3) \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$j_{sa}^{iss} j_{ik} j_{sa}^{j_i} = \sum_{k=1}^{(l_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s = l_{sa} + n - D - j_{sa} + 1)}$$

$$\sum_{j_{ik} = j_s + j_{sa}^{ik} - 1} \sum_{(j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})} \sum_{j_i = j_{sa} + s - j_{sa}}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)}^{( )} \sum_{n_s = n_{sa} + j_{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^{ik}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^{ik}, \dots, \mathbb{k}_3, j_{sa}^{ik}\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^{ik}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^{ik}, \dots, \mathbb{k}_3, j_{sa}^{ik}\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \vee$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{iss} = \sum_{k=1}^{(j_s)} \sum_{(j_s = l_{sa} + n - D - j_{sa} + 1)}^{(l_s)}$$

$$\sum_{j_{ik} = j_s + j_{sa}^{ik} - 1}^{(j_s)} \sum_{(j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}^{(j_s)} \sum_{j_i = j_{sa} + s - j_{sa}}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{( )} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3} \frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_{ik} < n$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - j_{ik} \wedge l_i + j_{sa} - s = l_s \wedge$

$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1 \wedge$

$((D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 7 \wedge s = s + k \wedge$

$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k \wedge$

$k_z: z = 2 \wedge k = k_2 + k_3) \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 5 \wedge s = s + k \wedge$

$k_z: z = 2 \wedge k = k_1 + k_3) \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3)) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{iSS} = \sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{( )}$$

$$\sum_{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j_{sa}=j_i+j_{sa}-s)}^{( )} \sum_{j_i=l_{ik}+s+n-D-j_{sa}^{ik}}^{l_s+s-1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-k_2)}^{( )} \sum_{n_s=n_{sa}+j_{sa}-j_i-k_3}$$

$$\frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1 \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$\begin{aligned} S_{j_s, j_{ik}}^{ISS} &= \sum_{k=1}^{\binom{()}{j_s=j_{ik}-j_{sa}^{ik}+1}} \\ & \sum_{j_{sa}^{ik}=\mathbb{k}_1+1}^{j_{sa}^{ik}-1} \sum_{j_i=j_{sa}+s-j_{sa}}^{j_{sa}-D-j_{sa}^{ik}} \\ & \sum_{n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\ & \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{\binom{()}{n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3} \\ & \frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!} \cdot \\ & \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\ & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \end{aligned}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$



$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1 \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{ISS} = \sum_{k=1} \sum_{(j_s = \dots - j_{sa}^{ik} + 1)}^{(\dots)}$$

$$\sum_{j_{ik} = l_{ik} + n - D}^{l_s + j_{sa}^{ik} - 1} \sum_{(j_{sa} = j_{ik} + \dots - j_{sa}^{ik})}^{(\dots)} j_i = j_{sa} + s$$

$$\sum_{n_i = \dots}^n \sum_{(n_{is} = n + \dots + 1)}^{(\dots)} n_{ik} = n_{is} \dots j_{ik} - \mathbb{k}_1$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - \dots - \mathbb{k}_2)}^{(\dots)} n_s = n_{sa} + j_{sa} - j_i - \mathbb{k}_3$$

$$\frac{(n_i + \dots + j_s^s - j_s - j_{sa}^{ik} - I)!}{(n_i - \dots - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq \dots < n \wedge l_s > 1) \dots \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{sa} - j_{sa}^{ik} + 1 \dots s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + \dots - j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + \dots > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$\dots < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1 \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\}$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{ISS} = \sum_{k=1}^{(l_s)} \sum_{(j_s = l_{ik} + n - D - j_{sa}^{ik} + 1)}^{(l_s)}$$

$$\sum_{j_{ik} = j_s + j_{sa}^{lk} - 1}^{(j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})} \sum_{j_i = j_{sa} + s - j_{sa}^{ik}}^{( )}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_{sa} - j_{ik} - k_1}^{( )}$$

$$\sum_{(n_{sa} = n_{ik} + j_{sa} - j_{sa}^{lk_1})}^{( )} \sum_{(n_{sa} = n_{sa} + j_{sa} - j_i)}^{( )}$$

$$\frac{(n_i + j_{ik} - j_{sa} - s - j_{sa}^{lk} - 1)!}{(n_i - n + 1)! \cdot (n_{ik} + j_{sa} - j_{sa}^{ik})!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{lk} - 1 \leq j_{ik} \leq j_{sa}^{lk} + j_{sa} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa}^{lk} \wedge j_i + j_{sa} - s \wedge j_{sa} - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_{sa} + j_{sa}^{lk} - j_{sa}^{lk_1} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D - n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$s > n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k \wedge$

$k_z: z = 2 \wedge k = k_1 + k_3) \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k \wedge$

$k_z: z = 2 \wedge k = k_1 + k_2) \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 5 \wedge s = s + k \wedge$

$k_z: z = 1 \wedge k = k_1) \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 5 \wedge s = s + k \wedge$

$k_z: z = 1 \wedge k = k_2) \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 5 \wedge s = s + k \wedge$

$k_z: z = 1 \wedge k = k_3) \vee$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{ISS} = \sum_{k=1} \sum_{(j_s = j_{ik} + l_s - l_{ik})}^{( )}$$

$$\sum_{j_{ik} = j_{sa} + l_{ik} - l_{sa}} \sum_{(j_{sa} = j_i + l_{sa} - l_i)}^{( )} \sum_{j_i = l_i + n - D}^n$$

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{sa}-k_2)}^{( )} \sum_{n_s=n_{sa}+j_{sa}^{sa}-j_i-k_3} \frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_s)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_{sa} < n$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_s \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3 \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3 \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{l_s} = \sum_{k=1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()}$$

$$\sum_{j_{ik}=j_{sa}+l_{ik}-l_{sa}} \sum_{(j_{sa}=j_i+j_{sa}-s)}^{()}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{()}$$

$$\frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$



$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz S_{j_s, j_{ik}, j_{sa}, j_i}^{iSS} = \sum_{k=1}^{\mathbb{k}} (j_s = j_{ik} - \mathbb{k}_1)$$

$$\sum_{j_i = j_{sa} + j_{sa}^{ik} - j_{sa} - \mathbb{k}_1}^{\mathbb{k}} (j_{sa} = j_i)$$

$$\sum_{n_i = n + \mathbb{k}}^n (n_{is} = n_i - j_s + 1) \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}^{\mathbb{k}} \sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)}^{\mathbb{k}} (n_s = n_{sa} + j_{sa} - j_i - \mathbb{k}_3)$$

$$\frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s = n + 1 \wedge$$

$$2 \leq j_s \leq j_{sa} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_s + j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \dots) \vee$$

$$(D \geq \dots < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq \dots = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \dots = \mathbb{k}_2) \vee$$

$$(D \geq \dots < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i}^{iss} = \sum_{k=1}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()} \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{()} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{()} \sum_{j_i=l_i+n}^n \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}}^{()} \sum_{j_{ik}-l_{k1}}^{()} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{sa})}^{()} \sum_{(n_s=n_{sa}+j^{sa}-j_i)}^{()} \frac{(n_i + j_{ik} - j_{sa} - j_i - s - j_{ik} - l_i)!}{(n_i + n - l_i)! \cdot (n_i + j_{ik} + j_{sa} - j_i - s - j_{sa}^{ik})!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n - 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa} \leq j_i \leq j_i + j_{sa} - s \wedge j^{sa} - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 \leq l_{sa} \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$((D - n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbf{k} \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbf{k} \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbf{k} \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbf{k} \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbf{k} \wedge$$

$$k_z: z = 1 \wedge k = k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{iss} = \sum_{k=1}^{\binom{()}{j_s=j_{ik}+l_s-l_{ik}}}$$

$$\sum_{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}^{\binom{()}{j_{sa}=j_i+j_{sa}-s}} \sum_{j_i=l_i+n-D}^n$$

$$\sum_{n_i=n+k}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{( )} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3} \frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_{sa} < n$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - j_{ik} \wedge l_i + j_{sa} - s > l_s \wedge$

$((D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j^i\} \wedge$

$s \geq 7 \wedge s = s + k \wedge$

$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k$

$k_z: z = 2 \wedge k = k_2 + k_3 \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k \wedge$

$k_z: z = 2 \wedge k = k_1 + k_3 \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k \wedge$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z \mathcal{S}_{j_s, j_{ik}, j_{sa}, j_i}^{l_s} = \sum_{k=1}^{()} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik} = j_{sa}^{ik} + l_{ik} - l_{sa}}^{()} \sum_{(j_{sa} = j_i + j_{sa} - s)}^{()} \sum_{j_i = l_i + n - D}^n$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)}^{()} \sum_{n_s = n_{sa} + j_{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = \mathbf{s} + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = \mathbf{s} + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz_{j_s}^{iss} j_{ik} j_{sa}^i = \sum_{k=1}^{\lfloor \frac{n}{2} \rfloor} \binom{n}{j_s=j_{ik}+k+1}$$

$$\sum_{j_{ik}=j_{sa}+j_{sa}^{ik}-j_s}^{\lfloor \frac{n}{2} \rfloor} \binom{n}{j_{sa}=j_i+j_{sa}^{ik}-j_s} \binom{n}{j_s=n-D}$$

$$\sum_{n_i=n+\mathbb{k}}^n \binom{n_i-j_s+1}{n_i=n+\mathbb{k}} \sum_{n_{is}=n+\mathbb{k}-j_s+1}^n \binom{n_i-j_s+1}{n_{is}=n+\mathbb{k}-j_s+1} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^n \binom{n_i-j_s+1}{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\binom{n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-\mathbb{k}_2}{n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-\mathbb{k}_2} \sum_{n_s=n_{sa}+j_{sa}^{ik}-j_i-\mathbb{k}_3}^n \binom{n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-\mathbb{k}_2}{n_s=n_{sa}+j_{sa}^{ik}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i+j_{ik}+j_{sa}^s-j_s-s-j_{sa}^{ik}-I)!}{(n_i+j_{ik}-I)! \cdot (n+j_{ik}+j_{sa}^s-j_s-s-j_{sa}^{ik})!}$$

$$\frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!}$$

$$\frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s = \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$



$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{ISS} = \sum_{k=1}^{( )} \sum_{(j_s = j_{ik} + l_s - l_{ik})}^{( )}$$

$$\sum_{j_{ik} = j_{sa} + l_{ik} - l_{sa}}^{( )} \sum_{(j_{sa} = j_i + l_{sa} - l_i)}^{( )} \sum_{j_i = l_{sa} + n + s - D - j_{ik}}^n$$

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} - j_{ik} - k_1}^{( )}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - k_2)}^{( )} \sum_{n_s = n_{sa} + j_{sa} - j_s - k_3}^{( )}$$

$$\frac{(n_i + j_{ik} - j_s - s - j_{sa} - k_1 - k_2 - k_3 - I)!}{(n_i - n - I)! \cdot (n_{is} - j_{ik} + j_{sa} - l_{sa} - s - j_{sa})!}$$

$$\frac{(l_s - 2)!}{(n - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n - 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa} - 1 \leq j_{ik} \leq j_{sa}^{ik} + j_{sa} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} < j_i + j_{sa} - s - j_{sa} + j_{sa} - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 \leq l_{sa} - j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D - n < n \wedge I = k > 0 \wedge$$

$$\{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

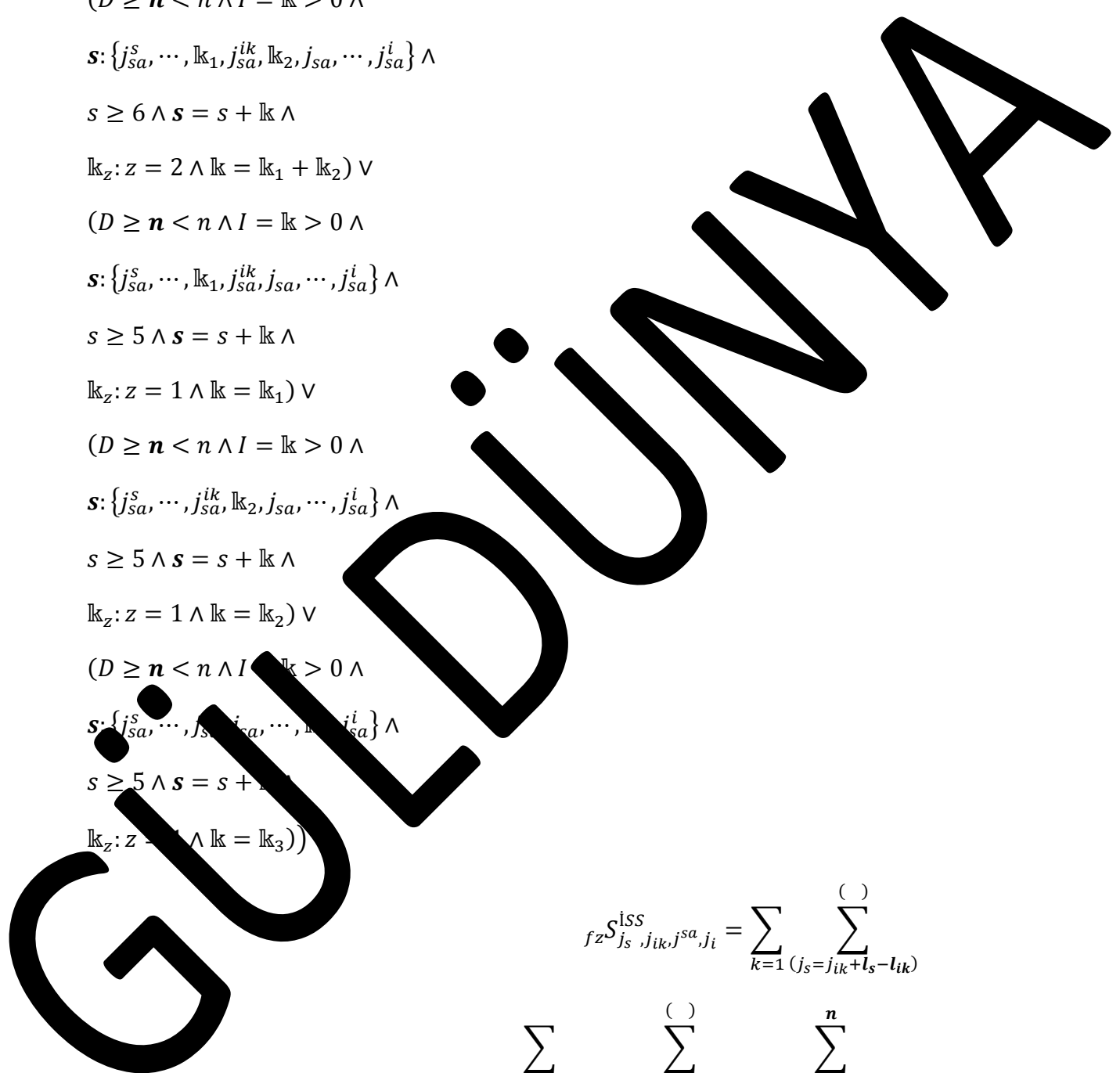
$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \vee$$

$$fz S_{j_s, j_{ik}, j_{sa}, j_i}^{iss} = \sum_{k=1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )}$$

$$\sum_{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j_{sa}=j_i+l_{sa}-l_i)}^{( )} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^n$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}$$



$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{( )} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3} \frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_s)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_{sa} \leq j_{sa}^{ik} + j_{sa} - j_{ik}$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - j_{ik} \wedge l_i + j_{sa} - s = l_s \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_2 + k_3 \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3 \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$fz \mathcal{D}_{j_s^{ls}, j_{ik}, j_{sa}, j_i} = \sum_{k=1}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ls}+l_{ik}-l_{sa}}^{()} \sum_{(j_{sa}=j_i+l_{sa}-l_i)}^{()} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^n$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ls}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j_{sa}^{ls}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz_{j_s}^{iss} j_{ik} j_{sa}^i = \sum_{k=1}^{\square} (j_s = j_{ik} + \dots + 1)$$

$$\sum_{j_{ik} = j_{sa} + j_{sa}^{ik}}^{\square} (j_{sa} = \dots - l_i) \dots \sum_{j_{sa} = \dots}^n \dots - j_{sa}$$

$$\sum_{n_i = n + \mathbb{k}}^n (n_{is} = n_{is} + j_s + 1) \dots \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)}^{\square} n_s = n_{sa} + j_{sa} - j_i - \mathbb{k}_3$$

$$\frac{(n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s = n + 1 \wedge$$

$$2 \leq j_s \leq j_{sa} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - s \wedge j_{sa}^s + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \Rightarrow$$



$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{ISS} = \sum_{k=1}^{( )} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )}$$

$$\sum_{j_{ik}=j_{sa}+l_{ik}-l_{sa}}^{( )} \sum_{(j_{sa}=j_i+l_{sa}-l_i)}^{( )} \sum_{j_i=l_{ik}+n+s-D-j_{ik}}^n$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-l_{k_1}}^{( )}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-l_{sa})}^{( )} \sum_{(n_s=n_{sa}+j_{sa}-j_i)}^{( )}$$

$$\frac{(n_i + j_{ik} - j_{sa} - l_{sa} - s - j_{ik} - l_i)!}{(n_i - n + l_i)! \cdot (n_i - j_{ik} + j_{sa} - l_{sa} - s - j_{sa} - j_i)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > D - n - 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq n - a + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa}^{ik} - j_{sa} \leq j_{sa}^{ik} < j_i + j_{sa} - s \wedge n - a + j_{sa}^{ik} - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > 0 \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$((D - n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 7 \wedge s = s + \mathbb{k}$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \vee$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{iss} = \sum_{k=1} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{( )}$$

$$\sum_{j_{ik} = j_{sa} + l_{ik} - l_{sa}} \sum_{(j_{sa} = j_i + l_{sa} - l_i)}^{( )} \sum_{j_i = l_{ik} + s + n - D - j_{sa}^{ik}}^n$$

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{( )} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3} \frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_{sa} \leq j_{ik} - j_{sa}^{ik} + 1$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - j_{ik} \wedge l_i + j_{sa} - s = l_s \wedge$

$((D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j^i\} \wedge$

$s \geq 7 \wedge s = s + k \wedge$

$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k \wedge$

$k_z: z = 2 \wedge k = k_2 + k_3 \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k \wedge$

$k_z: z = 2 \wedge k = k_1 + k_3 \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k \wedge$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{l_s} = \sum_{k=1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )}$$

$$\sum_{j_{ik}=j_{sa}+l_{ik}-l_{sa}} \sum_{(j_{sa}=j_i+l_{sa}-l_i)}^{( )} \sum_{j_i=l_s+n+s-D-1}^n$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{( )} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz S_{j_s, j_{ik}, j_{sa}, j_i}^{ISS} = \sum_{k=1}^{\mathbb{k}} (j_s = j_{ik} - l_{ik})$$

$$\sum_{j_{ik} = a+l_{sa} - l_{sa} (j_{sa} = n+j_{sa} - s)}^{(n+j_{sa}-s)} \sum_{j_i = n+l_i - l_{sa}}^{(n+j_{sa}-s)}$$

$$\sum_{n_i = n + \mathbb{k} (n_{is} = n_{is} - j_s + 1)}^n \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}^{(n_i - j_s + 1)}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)}^{(n)} \sum_{n_s = n_{sa} + j_{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge n + 1 \wedge$$

$$2 \leq j_s \leq j_s - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_s + j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - s \wedge j_{sa}^s + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{iSS} = \sum_{k=1}^{( )} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )}$$

$$\sum_{j_{ik}=j_{sa}+l_{ik}-l_{sa}}^{(n+j_{sa}-s)} \sum_{(j_{sa}=l_i+n+j_{sa}-D-s)}^{(n+j_{sa}-s)} \sum_{j_i=j_{sa}+s-j_{ik}}^{(n+j_{sa}-s)}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-k_1}^{(n_i-j_s+1)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa})}^{( )} \sum_{(n_s=n_{sa}+j_{sa}-j_{ik})}^{( )}$$

$$\frac{(n_i + j_{ik} - j_s - s - j_{sa} - l_{ik} - I)!}{(n_i - n - I)! \cdot (n_{is} - j_{ik} + j_{sa} - l_{sa} - s - j_{sa})!}$$

$$\frac{(l_s - 2)!}{(n - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n - 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa} - 1 \leq j_{ik} \leq j_{sa}^{ik} + j_{sa} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{ik} < j_i + j_{sa} - s - j_{sa} + j_{sa} - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 \leq l_{sa} - j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D - n < n \wedge I = k > 0 \wedge$$

$$\{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$



$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

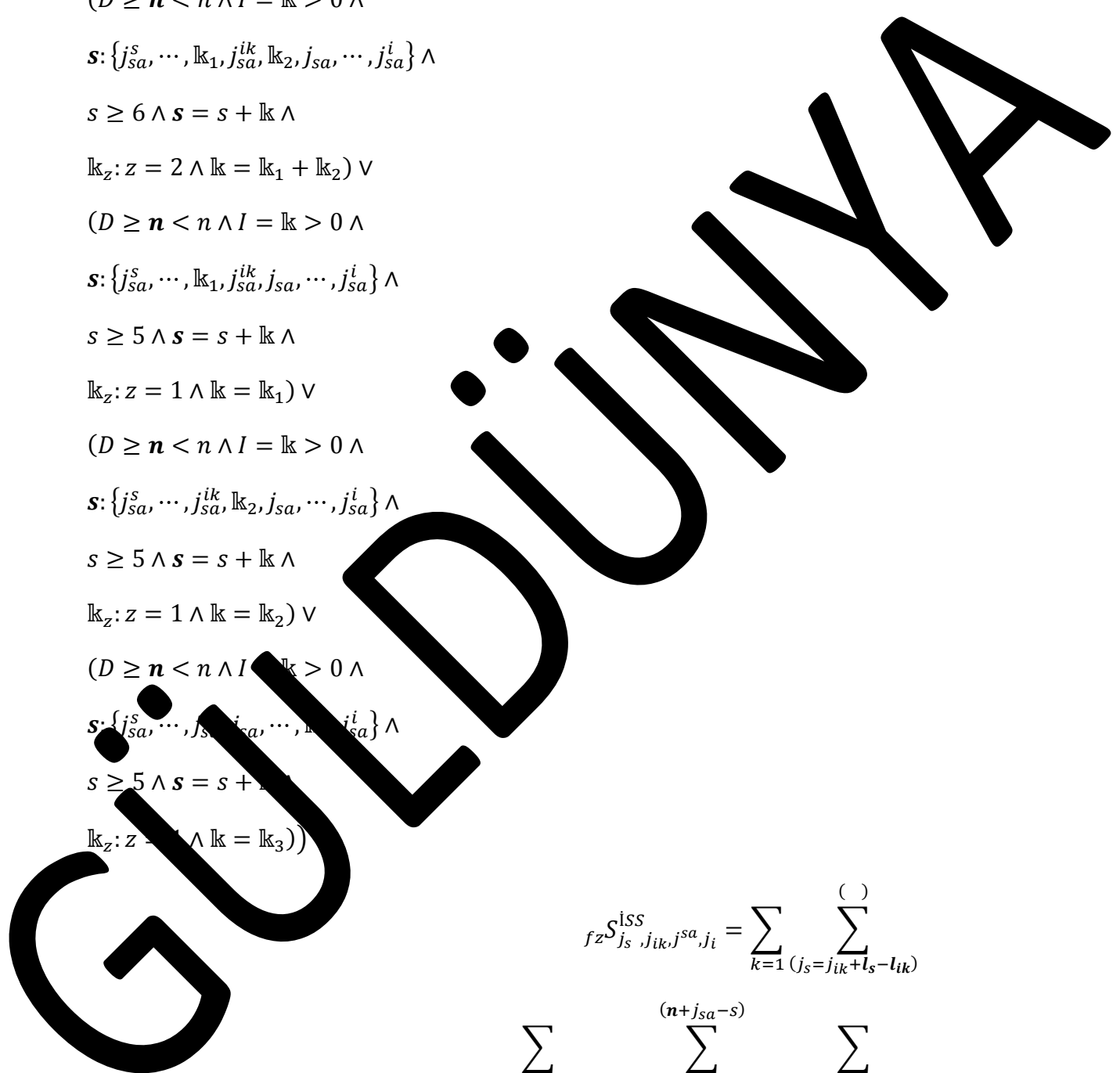
$$k_z: z = 1 \wedge k = k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$fz S_{j_s, j_{ik}, j_{sa}, j_i}^{iss} = \sum_{k=1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )}$$

$$\sum_{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j_{sa}=l_i+n+j_{sa}-D-s)}^{(n+j_{sa}-s)} \sum_{j_i=j_{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}$$



$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{sa}-k_2)}^{( )} \sum_{n_s=n_{sa}+j_{sa}^{sa}-j_i-k_3} \frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_s)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_{sa} < n$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - j_{ik} \wedge l_i + j_{sa} - s = l_s \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3 \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3 \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z \mathcal{D}_{j_s, j_{ik}, j_{sa}, j_i}^{l_s} = \sum_{k=1}^{(\cdot)} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik} = j_{sa}^{ik} + l_{ik} - l_{sa}}^{(n + j_{sa} - s)} \sum_{(j_{sa} = l_i + n + j_{sa} - D - s)} \sum_{j_i = j_{sa}^{ik} + l_i - l_{sa}}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa}^{ik} - \mathbb{k}_2)}^{(\cdot)} \sum_{n_s = n_{sa} + j_{sa}^{ik} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz S_{j_s, j_{ik}, j_{sa}, j_i}^{iSS} = \sum_{k=1}^{\lfloor j_s \rfloor} \binom{j_s}{k} \binom{j_{ik}}{k} \binom{j_{sa}}{k} \binom{j_i}{k}$$

$$\sum_{j_{ik}=j_{sa}+j_i}^{\binom{n+j_{sa}-s}{j_{sa}}} \sum_{j_{sa}=j_{ik}}^{\binom{n+j_{sa}}{j_{sa}}} \sum_{j_i=j_{sa}-j_{ik}}^{\binom{n+j_{sa}-s-j_{sa}}{j_i}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n_{is}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}$$

$$\frac{\binom{n+j_{ik}+j_{sa}^s-j_s-s-j_{sa}^{ik}-I)!}{(n_i-j_s+1)! \cdot (n+j_{ik}+j_{sa}^s-j_s-s-j_{sa}^{ik})!} \cdot \frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!} \cdot \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!}$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge l_s = n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{sa}^{ik} + j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{ISS} = \sum_{k=1}^{( )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{( )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+l_{ik}-l_{sa}}^{(n+j_{sa}-s)} \sum_{(j_{sa}^{ik}=l_i+n+j_{sa}-D-s)}^{(n+j_{sa}-s)} \sum_{j_i=j_{sa}^{ik}+s-j_{ik}+l_{ik}}^{(n+j_{sa}-s)}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-l_{k1}}^{(n_i-j_s+1)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-l_{sa})}^{( )} \sum_{(n_s=n_{sa}+j_{sa}^{ik}-j_i)}^{( )}$$

$$\frac{(n_i + j_{ik} - j_{sa}^{ik} - s - j_{ik} - l_{k1})!}{(n_i - n + l_k)! \cdot (n_{is} - j_{ik} - l_{k1} + j_{sa}^{ik} - j_i - j_{sa}^{ik})!}$$

$$\frac{(l_s - 2)!}{(n - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > D - n - 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq l_i + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa}^{ik} - j_{sa}^{ik} \leq j_{ik} \leq j_i + j_{sa} - s \wedge j_{sa}^{ik} - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > 0 \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$((D - n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 7 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \vee$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{iss} = \sum_{k=1} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{( )}$$

$$\sum_{j_{ik} = j_{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j_{sa} = l_i + n + j_{sa} - D - s)}^{(n + j_{sa} - s)} \sum_{j_i = j_{sa} + l_i - l_{sa}}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - k_1}$$



$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{( )} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3} (n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)! / ((n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!)$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_{sa} \leq j_{sa}^{ik} + j_{sa} - j_{ik}$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - j_{ik} \wedge l_i + j_{sa} - s = l_s \wedge$

$((D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j^i\} \wedge$

$s \geq 7 \wedge s = s + k \wedge$

$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k \wedge$

$k_z: z = 2 \wedge k = k_2 + k_3 \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k \wedge$

$k_z: z = 2 \wedge k = k_1 + k_3 \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k \wedge$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z S_{j_s^s, j_{ik}, j_{sa}, j_i}^{l_s} = \sum_{k=1}^{\binom{)}{}} \sum_{(j_s = j_{ik} + l_s - l_{ik})}^{\binom{)}{}} \sum_{j_{ik} = j_{sa} + l_{ik} - l_{sa}}^{\binom{)}{}} \sum_{(j_{sa} = l_{sa} + n - D)}^{\binom{)}{}} \sum_{j_i = j_{sa} + l_i - l_{sa}}^{\binom{)}{}} \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{\binom{)}{}} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}^{\binom{)}{}} \sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)}^{\binom{)}{}} \sum_{n_s = n_{sa} + j_{sa} - j_i - \mathbb{k}_3}^{\binom{)}{}} \frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz S_{j_s, j_{ik}, j_{sa}, j_i}^{iSS} = \sum_{k=1}^{\mathbb{k}} (j_s = j_{ik} - l_{ik})$$

$$\sum_{j_{ik} = \dots}^{\dots} \sum_{j_{sa} = \dots}^{\dots} \sum_{j_i = \dots}^{\dots}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n_{is} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)}^{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)} \sum_{n_s = n_{sa} + j_{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$2 \leq j_s \leq j_{sa} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_s + j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{ISS} = \sum_{k=1}^{( )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{( )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+l_{ik}-l_{sa}}^{(n+j_{sa}-s)} \sum_{(j_{sa}=l_{sa}+n-D)}^{(n+j_{sa}-s)} \sum_{j_i=j_{sa}^{ik}+l_i-1}^{(n+j_{sa}-s)}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-k_1}^{(n_i-j_s+1)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-l_{sa})}^{( )} \sum_{(n_s=n_{sa}+j_{sa}^{ik}-j_i)}^{( )}$$

$$\frac{(n_i + j_{ik} - j_{sa}^{ik} - s - j_{ik} - 1)!}{(n_i - n + 1)! \cdot (n_{ik} + j_{sa}^{ik} - j_i - j_{sa}^{ik})!} \cdot \frac{(l_s - 2)!}{(n - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n - 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq n - a + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa}^{ik} \leq j_{ik} \leq j_i + j_{sa} - s \wedge j_{sa}^{ik} - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > 0 \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D - n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{iss} = \sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{( )}$$

$$\sum_{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j_{sa}=l_{sa}+n-D)}^{(n+j_{sa}-s)} \sum_{j_i=j_{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}$$



$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{( )} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3} \frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_s)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_{sa} \leq j_{sa}^{ik}$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - j_{ik} \wedge l_i + j_{sa} - s = l_s \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3 \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3 \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$



$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{l_s} = \sum_{k=1}^{\binom{)}{}} \sum_{(j_s = j_{ik} + l_s - l_{ik})}$$

$$\sum_{j_s = j_{sa} + l_{ik} - l_{sa}}^{\binom{n + j_{sa} - s}{}} \sum_{(j_{sa} = l_{ik} + n + j_{sa} - D - j_{sa}^{ik})} \sum_{j_i = j_{sa} + l_i - l_{sa}}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)}^{\binom{)}{}} \sum_{n_s = n_{sa} + j_{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz_{j_s}^{iss} j_{ik} j_{sa}^i = \sum_{k=1}^{\lfloor \frac{n+1}{2} \rfloor} \binom{n+1}{k}$$

$$\sum_{j_{ik}=j_{sa}^i+l_{ik}}^{\lfloor \frac{n+j_{sa}-s}{2} \rfloor} \sum_{(j_{sa}=l_{ik}+j_{sa}-D-j_{sa})} \sum_{l_i=l_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n_{is}+j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n+j_{ik}+j_{sa}^s-j_s-s-j_{sa}^{ik}-I)!}{(n+j_{ik}+j_{sa}^s-j_s-s-j_{sa}^{ik})!}$$

$$\frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!}$$

$$\frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!}$$

$$D \geq n < n \wedge l_s = n + 1 \wedge$$

$$2 \leq j_s \leq j_{sa}^i - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa}^i + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{sa}^i - j_{sa}^{ik} \leq j_{sa}^i \leq j_i + j_{sa} - s \wedge j_{sa}^i + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \dots) \vee$$

$$(D \geq \dots < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq \dots = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \dots = \mathbb{k}_2) \vee$$

$$(D \geq \dots < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{ISS} = \sum_{k=1}^{( )} \sum_{(j_s = j_{ik} + l_s - l_{ik})}^{( )}$$

$$\sum_{j_{ik} = j_{sa} + l_{ik} - l_{sa}}^{(n + j_{sa} - s)} \sum_{(j_{sa} = l_s + n + j_{sa} - D - 1)}^{(n + j_{sa} - s)} \sum_{j_i = j_{sa} + l_i - l_{sa}}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} - j_{ik} - k_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - l_{sa})}^{( )} \sum_{(n_s = n_{sa} + j_{sa} - l_s)}$$

$$\frac{(n_i + j_{ik} - j_s - s - j_{sa} - l_{sa} - l_{ik} - I)!}{(n_i - n - I)! \cdot (n_{is} - j_{ik} - j_{sa} - l_{sa} - l_{ik} - s - j_{sa})!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > D - n - 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa} - 1 \leq j_{ik} \leq j_{sa}^{ik} + j_{sa} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} - j_i + j_{sa} - s - j_{sa} - j_{sa} \leq j_i \leq n \wedge$

$l_{sa} - j_{sa}^{ik} + 1 \leq l_{sa} - j_{sa} - j_{sa} - l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$((D - n < n \wedge I = k > 0 \wedge$

$\{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 7 \wedge s = s + k$

$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k \wedge$

$k_z: z = 2 \wedge k = k_2 + k_3) \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \vee$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{iSS} = \sum_{k=1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{n+j_{sa}^{ik}-s} \sum_{(j_{sa}=j_{ik}+l_{sa}-l_{ik})}^{( )} \sum_{j_i=j_{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-k_2)}^{( )} \sum_{n_s=n_{sa}+j_{sa}^{ik}-j_i-k_3} (n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)! \\ \frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!} \cdot \\ \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\ \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_{sa} < n$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_s \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz_{j_s^{l_s}, j_{ik}, j_{sa}, j_i} = \sum_{k=1}^{l_s} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{j_{sa}^{ik}-s} \sum_{(j_{sa}=j_{ik}+l_{sa}-l_{ik})}^{()}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{()}$$

$$\frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$



$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

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$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$fz^{\text{ISS}} \sum_{j_s, j_{ik}, j_{sa}, j_i} \sum_{\mathbb{k}} \sum_{(j_s = j_{ik} + l_s - l_{ik})}$$

$$\sum_{j_{ik} = l_i + n + j_{sa}^{ik} - D}^{+j_{sa}^{ik} - s} \sum_{(j_{sa} = j_{ik} + j_{sa}^{ik} - j_{sa}^{ik})} \sum_{j_i = j_{sa}^{ik} + l_i - l_{sa}}$$

$$\sum_{n_i = \dots}^n \sum_{(n_{is} = n_{is} + j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)} \sum_{n_s = n_{sa} + j_{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

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$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$(\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i}^{i s s} = \sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{( )}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{n+j_{sa}^{ik}-s} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{( )} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_i+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_i-j_i-\mathbb{k}_1}$$

$$\frac{\sum_{(n_{sa}=n_{ik}-j_i)}^{( )} \sum_{n_s=n_i-j_i-\mathbb{k}_3}^{( )} (n_i+n_{sa}+j_{sa}^{s}-s-j_{sa})!}{(n_i-n-1)! (n+n_{ik}+j_{ik}^{s}-j_s-s-j_{sa}^{ik})!} \cdot \frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!} \cdot \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_i \leq j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{ik} + 1 = l_s \wedge l_s + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0) \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$(\mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\}$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

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$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i}^{ISS} = \sum_{k=1} \sum_{(j_s = j_{ik} + l_s - l_{ik})}^{( )}$$

$$\sum_{j_{ik} = l_i + n + j_{sa}^{ik} - D - s}^{n + j_{sa}^{ik} - s} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}^{( )} \sum_{j_i = j^{sa} + s - j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{i_s}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{i_k}=n_{i_s}+j_s-j_{i_k}-\mathbb{k}_1} \sum_{(n_{s_a}=n_{i_k}+j_{i_k}-j^{s_a}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{s_a}+j^{s_a}-j_i-\mathbb{k}_2} \frac{(n_i + j_{i_k} + j_{s_a}^s - j_s - s - j_{s_a}^{i_k} - I)!}{(n_i - n - I)! \cdot (n + j_{i_k} + j_{s_a}^s - j_s - s - j_{s_a}^{i_k})!} \cdot \frac{(l_s - I)!}{(l_s - I)! \cdot (l_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - l_i - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{i_k} - j_{s_a}^{i_k} + 1 \wedge j_s + j_{s_a}^{i_k} - 1 \leq j_{i_k} \leq j^{s_a} - j_{s_a}^{i_k} - j_{s_a}$$

$$j_{i_k} + j_{s_a} - j_{s_a}^{i_k} \leq j^{s_a} \leq j_i + j_{s_a} - s \wedge j_i + s - j_{s_a} \leq j_i < n \wedge$$

$$l_{i_k} - j_{s_a}^{i_k} + 1 > l_s \wedge l_{s_a} + j_{s_a}^{i_k} - j_i = l_{i_k} \wedge l_{s_a} + j_{s_a} - s > l_i \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{s_a}^s, \dots, \mathbb{k}_1, j_{s_a}^{i_k}, \mathbb{k}_2, j_{s_a}, \dots, \mathbb{k}_3, j_{s_a}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_2: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{s_a}^s, \dots, j_{s_a}^{i_k}, \mathbb{k}_2, j_{s_a}, \dots, \mathbb{k}_3, j_{s_a}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_2: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{s_a}, \dots, \mathbb{k}_1, j_{s_a}^{i_k}, j_{s_a}, \dots, \mathbb{k}_3, j_{s_a}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_2: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{ISS} = \sum_{k=1} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik} = l_i + n + j_{sa}^{ik} - D - s}^{n + j_{sa}^{ik} - s} \sum_{(j_{sa} = j_{ik} + l_{sa} - l_{ik})} \sum_{j_i = j_{sa} + s - j_{sa}}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - k_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - k_2)} \sum_{n_s = n_{sa} + j_{sa} - j_i - k_3}$$

$$\frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$



$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$\begin{aligned} & \sum_{k=1}^{(j_s=j_{ik}-j_{sa}^{ik}+1)} S_{j_s, j_{ik}}^{ISS} = \sum_{k=1}^{(j_s=j_{ik}-j_{sa}^{ik}+1)} \sum_{j_i=j_{sa}+l_i-l_{sa}}^{(n+l_i+n+j_{sa}-j_{sa}^{ik}-s)} \sum_{n+l_k}^{(n+l_k-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(n_{is}=n+l_k-j_s+1)} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}^{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)} \\ & \frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \end{aligned}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i}^{iSS} = \sum_{k=1} \sum_{(j_s=j_{ik}+l_s-l_i)}^{()} \sum_{j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa}}^{n+j_{sa}^{ik}-s} \sum_{(j^{sa}=j_{ik}+l_{sa})}^{()} \sum_{(j_i=j^{sa}+l_i-l_{sa})}^{()} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{ik}+j_s-j_{ik}-\mathbb{k}_1)}^{(n_i-j_s+1)} \sum_{(n_{sa}=n_{ik}+j^{sa}-\mathbb{k}_2)}^{(n_{sa}=n_{ik}+j^{sa}-\mathbb{k}_2)} \sum_{(n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}^{(n_{sa}+j^{sa}-j_i-\mathbb{k}_3)} \frac{(n_i+j_{ik}+j_{sa}^s)(j_s-s-j_{sa}^{ik}-I)!}{(n_i-n_{ik})! \cdot (n_{ik}+j_{sa}^s-j_s-s-j_{sa}^{ik})!} \cdot \frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!} \cdot \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!}$$

$$D \geq n < n \wedge l_s = D - n - 1 \wedge$$

$$2 \leq j_{ik} - j_{sa}^{ik} + j_s + j_{sa} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_{sa} + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - l_{sa}^{ik} + 1 = l_s - j_{sa}^{ik} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_1, j_{sa}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3)) \Rightarrow$$

$$fz_{j_s, j_{ik}, j_{sa}, j_i}^{ISS} = \sum_{k=1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )}$$

$$\sum_{j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa}}^{n+j_{sa}^{ik}-s} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j_{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-l_{k_2})} \sum_{n_s=n_{sa}+l_{sa}-j_i-l_{k_3}}$$

$$\frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - 1)!}{(n_i - n - l)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!}$$

$$\frac{(l_s - 2)!}{(l_s - 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)}{(D + j_{ik} + n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} \leq j_{ik} \leq j_{sa}^{ik} + j_{sa} - j_{sa}^{ik} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - s \wedge j_{sa}^{ik} + j_{sa} - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_{sa} + j_{sa} - s = l_{sa} \wedge$

$((D \geq n < n \wedge l_s > 0 \wedge$

$s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, l_{k_2}, j_{sa}, \dots, l_{k_3}, j_{sa}^i\}$

$s \geq 6 \wedge s = s + l_k \wedge$

$l_{k_z}: z = 2 \wedge l_k = l_{k_1} + l_{k_2} + l_{k_3}) \vee$

$(D \geq n < n \wedge l_s > 0 \wedge$

$s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, l_{k_2}, j_{sa}, \dots, l_{k_3}, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + l_k \wedge$

$l_{k_z}: z = 2 \wedge l_k = l_{k_2} + l_{k_3}) \vee$

$(D \geq n < n \wedge l_s > 0 \wedge$

$s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, l_{k_2}, j_{sa}, \dots, l_{k_3}, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + l_k \wedge$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\}$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \vee$$

$$fz S_{j_s, j_{ik}, j_{sa}, j_i}^{iss} = \sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{( )}$$

$$\sum_{j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa}}^{n+j_{sa}^{ik}-s} \sum_{(j_{sa}=j_{ik}+l_{sa}-l_{ik})}^{( )} \sum_{j_i=j_{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-\mathbb{k}_2)}^{( )} \sum_{n_s=n_{sa}+j_{sa}^{ik}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - l_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\}) \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \Rightarrow$$

$$f_z S_{j_s, j_{ik}}^{ISS} j_i = \sum_{k=1}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)}$$

$$\sum_{j_{ik}=l_{sa}+n+1}^{(\cdot)} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\cdot)} \sum_{j_i=j_{sa}+l_i-l_{sa}}^{(\cdot)}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}^{(\cdot)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-k_2)}^{(\cdot)} \sum_{n_s=n_{sa}+j_{sa}-j_i-k_3}^{(\cdot)}$$

$$\frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$



$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z^{ISS} S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{j_s=j_{ik}+j_{sa}-l_{ik}}^{( )} \sum_{j_{ik}=l_{ik}+n}^{n+j_{sa}^{ik}-s} \sum_{j_{sa}=j_{ik}+l_{sa}-l_{ik}}^{( )} \sum_{j_i=j_{sa}+l_i-l_{sa}}^{( )} \sum_{n_i=n+\mathbb{k}_1}^{( )} \sum_{n_i=n+\mathbb{k}-j_s}^{( )} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{( )} \sum_{n_s=n_{ik}+j_{ik}-l_{sa}-\mathbb{k}_2}^{( )} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}^{( )} \frac{+j_{ik}+j_{sa}^s-j_s-s-j_{sa}^{ik}-I)!}{(n_i-n_{ik}-I)! \cdot (n+j_{ik}+j_{sa}^s-j_s-s-j_{sa}^{ik})!} \cdot \frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!} \cdot \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!}$$

$$\geq n < n \wedge l_s > D - \dots + 1 \wedge$$

$$2 \leq j_i \leq j_{ik} - j_s \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - s \wedge j_{sa}^s + s - j_{sa} \leq j_i \leq n \wedge$$

$$j_{sa} - j_{sa}^{ik} - 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i}^{ISS} = \sum_{k=1}^{( )} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik} = l_{ik} + n - D}^{n + j_{sa}^{ik} - s} \sum_{(j^{sa} = j_{ik} + l_{sa} - l_{ik})}^{( )} \sum_{j_i = j^{sa} + l_i - l_i}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} - j_{ik} - k_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - k_1)}^{( )} \sum_{(n_s = n_{sa} + j^{sa} - j_i)}$$

$$\frac{(n_i + j_{ik} + j_{sa} - s - j_{ik} - 1)!}{(n_i + n - 1)! \cdot (n_{ik} + j_{sa} - j_{sa} - j_{ik})!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n \wedge I = k > 0 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \wedge j_i + j_{sa} - s \wedge j^{sa} - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_{sa} + j_{ik} - j_{sa} \wedge l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D - n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

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$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

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$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \vee$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{ISS} = \sum_{k=1} \sum_{(j_s = j_{ik} + l_s - l_{ik})}^{( )}$$

$$\sum_{j_{ik} = l_s + n + j_{sa}^{ik} - D - 1}^{n + j_{sa}^{ik} - s} \sum_{(j_{sa} = j_{ik} + l_{sa} - l_{ik})}^{( )} \sum_{j_i = j_{sa} + l_i - l_{sa}}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_i = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{( )} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3} \frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_s)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_{sa} \leq j_{sa}^{ik} + j_{sa}$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - j_{ik} \wedge l_i + j_{sa} - s = l_s \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3 \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3 \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{ISS} = \sum_{k=1}^{(n-s+1)} \sum_{(j_s=l_i+n-D-s+1)}^{(n-s+1)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s}^{( )} \sum_{(j_{sa}=j_{ik}+l_{sa}-l_{ik})}^{( )} \sum_{j_i=j_{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{( )} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$



$s \geq 5 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 5 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{ISS} = \sum_{k=1}^{(n-1)} (j_s = l_i + n - k + 1) \sum_{j_{ik} = l_{ik} - l_s}^{( )} \sum_{j_{sa} = j_{ik} + l_{sa}}^{( )} \sum_{j_i = j_{sa} + s - j_{sa}}^{( )} \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_i = n - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_i + j_s - j_{ik} - \mathbb{k}_1}^{( )} \sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)}^{( )} \sum_{n_s = n_{sa} + j_{sa} - j_i - \mathbb{k}_3}^{( )} \frac{(n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$2 \leq j_s \leq j_s - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - s \wedge j_{sa}^s + s - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 7 \wedge s = s + \mathbb{k} \wedge$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\}$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{ISS} = \sum_{k=1}^{(n-s+1)} \sum_{(j_s=l_i+n-D-s+1)}^{(n-s+1)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s}^{( )} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{( )} \sum_{j_i=j_{sa}+l_i-l_s}^{( )}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-k_1}^{( )}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik})}^{( )} \sum_{(n_s=n_{sa}+j_{sa}^{ik}-j_i)}^{( )}$$

$$\frac{(n_i + j_{ik} - j_{sa}^{ik} - s - j_{sa}^{ik} - I)!}{(n_i - n + I)! \cdot (n_{ik} + j_{sa}^{ik} - j_i - s - j_{sa}^{ik})!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > D - n - 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa}^{ik} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa}^{ik} - j_{sa}^{ik} \leq j_{sa}^{ik} \leq j_i + j_{sa} - s \wedge j_{sa}^{ik} - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > 0 \wedge l_{sa} + j_{sa}^{ik} - j_{sa}^{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$((D - n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}^i, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 7 \wedge s = s + k \wedge$

$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}^i, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k \wedge$

$k_z: z = 2 \wedge k = k_2 + k_3) \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

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$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \vee$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{iSS} = \sum_{k=1}^{(n-s+1)} \sum_{(j_s=l_i+n-D-s+1)}^{(n-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j_{sa}=j_{ik}+l_{sa}-l_{ik})}^{( )} \sum_{j_i=j_{sa}^{ik}+l_i-l_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{( )} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3} \frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_{sa} \leq j_{sa}^{ik} + j_{sa} - j_{ik}$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > j_{ik} \wedge l_i + j_{sa} - s > l_s \wedge$

$((D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j^i\} \wedge$

$s \geq 7 \wedge s = s + k \wedge$

$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k \wedge$

$k_z: z = 2 \wedge k = k_2 + k_3 \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k \wedge$

$k_z: z = 2 \wedge k = k_1 + k_3 \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k \wedge$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{ISS} = \sum_{k=1}^{(n-s+1)} \sum_{(j_s=l_i+n-D-s+1)}^{(n-s+1)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s}^{( )} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{( )} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{( )} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{ISS} = \sum_{k=1}^{(n-1)} (j_s = l_i + n - k + 1)$$

$$\sum_{j_{ik} = j_{sa} - 1}^{j_{sa} - 1} \sum_{j_i = j_{ik} + l_{sa} - j_s}^{j_{sa} - j_s} \sum_{j_s = j_i + s - j_{sa}}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)}^{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)} \sum_{n_s = n_{sa} + j_{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s = n + 1 \wedge$$

$$2 \leq j_s \leq j_{sa} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_s + j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$



$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

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$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{ISS} = \sum_{k=1}^{(n-s+1)} \sum_{(j_s=l_i+n-D-s+1)}^{(n-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{( )} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{( )} \sum_{j_i=j_{sa}+l_i-l_{sa}^{ik}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik})}^{( )} \sum_{(n_s=n_{sa}+j_{sa}^{ik}-j_i)}$$

$$\frac{(n_i + j_{ik} - j_{sa}^{ik} - s - j_{sa}^{ik} - I)!}{(n_i - I)! \cdot (n_{sa} + j_{sa}^{ik} - j_i - s - j_{sa}^{ik})!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

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$$D \geq n < n \wedge l_s > D - n - 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa}^{ik} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa}^{ik} \leq j_{sa}^{ik} < j_i + j_{sa} - s \wedge j_{sa}^{ik} - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_{sa}^{ik} \wedge l_{sa}^{ik} + j_{sa}^{ik} - j_{sa}^{ik} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D - n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}^s, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

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$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}^s, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

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$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

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$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_3, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3))$$

$$fz S_{j_s, j_{ik}, j_{sa}, j_i}^{iSS} = \sum_{k=1}^{(n-s+1)} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s} \sum_{(j_{sa}=j_{ik}+l_{sa}-l_{ik})} \sum_{j_i=j_{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}$$



$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{( )} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3} \frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_s)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_{sa} \leq j_{sa}^{ik} + j_{sa}$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > j_{ik} \wedge l_i + j_{sa} - s = l_s \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3 \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3 \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$S_{j_s, j_{ik}, j_{sa}, j_i}^{iss} = \sum_{k=1}^{(n-s+1)} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(n-s+1)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s}^{(n-s+1)} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(n-s+1)} \sum_{j_i=j_{sa}^{ik}+l_i-l_{sa}}^{(n-s+1)}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(n_i-j_s+1)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-\mathbb{k}_2)}^{(n-s+1)} \sum_{n_s=n_{sa}+j_{sa}^{ik}-j_i-\mathbb{k}_3}^{(n-s+1)}$$

$$\frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz S_{j_s, j_{ik}, j_{sa}, j_i}^{ISS} = \sum_{(j_s=l_{sa}+n-l_s+1)}^{(n-s)} \sum_{(j_{ik}=j_{sa}-1)}^{( )} \sum_{(j_{ik}+l_{sa})}^{( )} \sum_{(j_i=l_i-l_{sa})}^{( )} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{( )} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}^{( )} \frac{(n_i+j_{ik}+j_{sa}^s-j_s-s-j_{sa}^{ik}-I)!}{(n_i-j_s+1)! \cdot (n+j_{ik}+j_{sa}^s-j_s-s-j_{sa}^{ik})!} \cdot \frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!} \cdot \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!}$$

$$D \geq n < n \wedge l_s = n + 1 \wedge$$

$$2 \leq j_s \leq j_{sa} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_s + j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \Rightarrow$$



$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{ISS} = \sum_{k=1}^{(n-s+1)} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(n-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{( )} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{( )} \sum_{j_i=j_{sa}^{ik}+l_i-l_{sa}}^{( )}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-l_{k_1}}^{( )}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik})}^{( )} \sum_{(n_s=n_{sa}+j_{sa}^{ik}-j_i)}^{( )}$$

$$\frac{(n_i + j_{ik} - j_{sa}^{ik} - s - j_{sa}^{ik} - I)!}{(n_i - n + I)! \cdot (n_{ik} + j_{sa}^{ik} - j_{sa}^{ik} - j_{sa}^{ik})!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n - 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa}^{ik} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa}^{ik} \leq j_{sa}^{ik} \leq j_i + j_{sa} - s \wedge j_{sa}^{ik} - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_{sa}^{ik} \wedge l_{sa}^{ik} - j_{sa}^{ik} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D - n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \vee$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{ISS} = \sum_{k=1}^{(n-s+1)} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(n-s+1)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s}^{( )} \sum_{(j_{sa}=j_{ik}+l_{sa}-l_{ik})}^{( )} \sum_{j_i=j_{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{( )} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3} \frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - l_i)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_s < n -$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - j_{ik} \wedge l_i + j_s - s = l_s \wedge$

$((D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j^i\} \wedge$

$s \geq 7 \wedge s = s + k \wedge$

$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k \wedge$

$k_z: z = 2 \wedge k = k_2 + k_3 \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k \wedge$

$k_z: z = 2 \wedge k = k_1 + k_3 \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k \wedge$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$S_{j_s, j_{ik}, j_{sa}, j_i}^{iSS} = \sum_{k=1}^{(n-s+1)} \sum_{(j_s = l_{ik} + n - D - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik} = j_s + j_{sa}^{ik} - 1} \sum_{(j_{sa} = j_{ik} + l_{sa} - l_{ik})} \sum_{j_i = j_{sa} + l_i - l_{sa}}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)}^{( )} \sum_{n_s = n_{sa} + j_{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz^{\text{ISS}} \sum_{j_s, j_{ik}, j_{sa}, j_i} \sum_{\mathbb{k}} \sum_{(j_s = j_{ik} + l_s - l_{ik})} \sum_{(j_{ik} = j_i + l_{ik} - l_{sa})} \sum_{(n_i = n_{is} + j_s + 1)} \sum_{(n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1)} \sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)} \sum_{(n_s = n_{sa} + j_{sa} - j_i - \mathbb{k}_3)} \frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq n - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i}^{l_{ss}} = \sum_{k=1}^{( )} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )} \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{( )} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{( )} \sum_{j_i=s+1}^{l_{sa}+j_s-s} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{sa}=n_{is}-l_{sa}+j_s-l_{ik_1})}^{(n_{sa}=n_{is}-l_{sa}-l_{ik_2})} \sum_{(n_s=n_{sa}+j^{sa}-j_i-l_{k_3})}^{(n_s=n_{sa}+j^{sa}-j_i-l_{k_2})} \frac{(n_i - j_{ik} + j_{sa} - j_s - s - j_{sa})!}{(n_i - n - l)! (n + j_{ik} - j_{sa} - j_s - s - j_{sa})!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + \dots - n \wedge$$

$$1 \leq j_{ik} \leq j_{ik} - j_{sa} + \dots \wedge j_s + j_{sa} - 1 \dots j^{sa} + j_{sa} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa} \dots j_{sa} \leq j_{sa} - s \dots j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} \dots + 1 = l_s \wedge \dots + j_{sa} \dots = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0) \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$



$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 5 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 5 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \dots) \vee$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

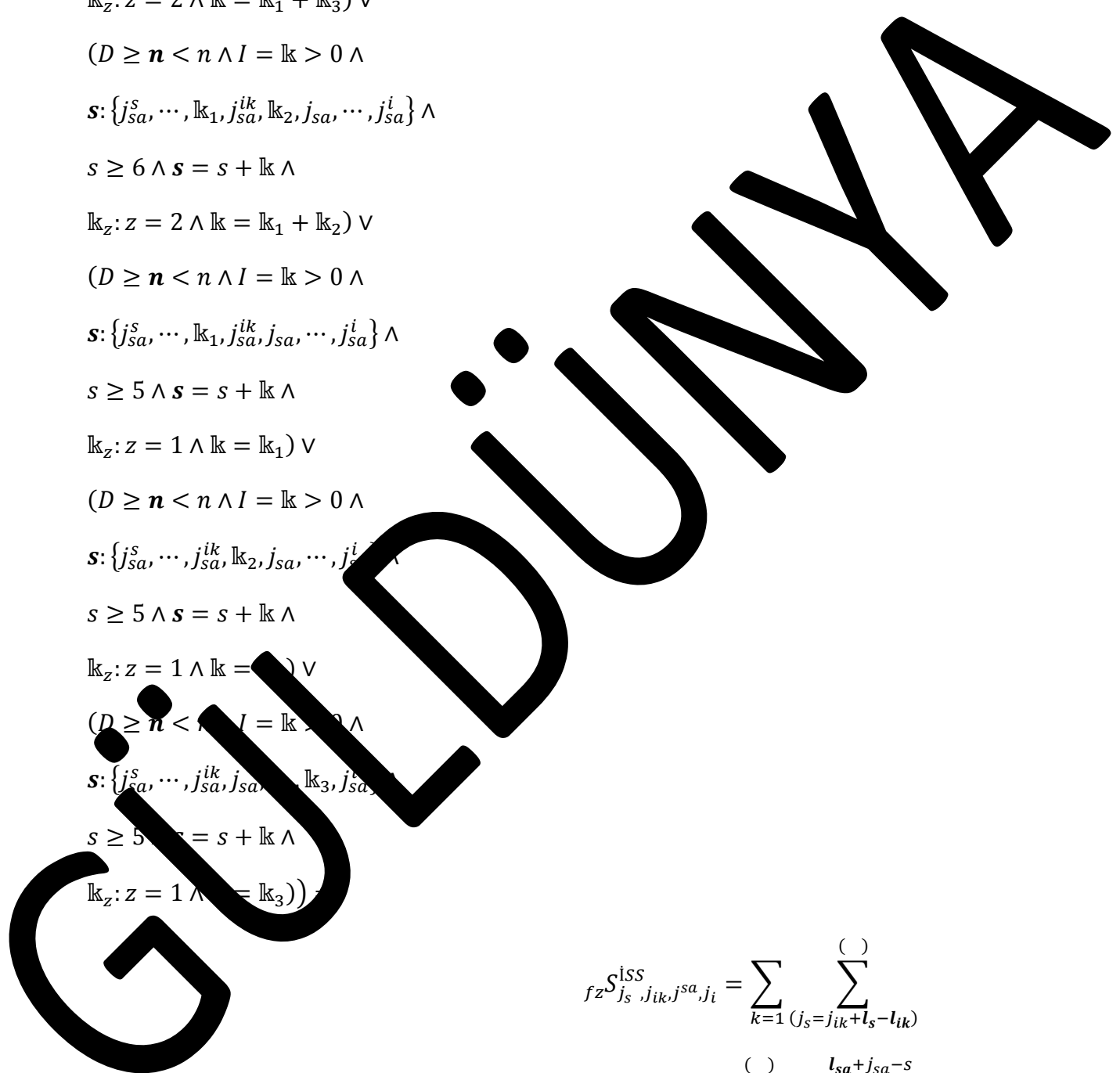
$s \geq 5 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 1 \wedge \dots = \mathbb{k}_3)) \vee$

$$f_z S_{j_s}^{ISS} j_{ik} j_{sa} j_i = \sum_{k=1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )}$$

$$\sum_{j_{ik}=j_{sa}+l_{ik}-l_{sa}} \sum_{(j_{sa}=j_i+j_{sa}-s)}^{( )} \sum_{j_i=s+1}^{l_{sa}+j_{sa}-s}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$



$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{sa}-k_2)}^{( )} \sum_{n_s=n_{sa}+j_{sa}^{sa}-j_i-k_3} \frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_s)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_{sa} \leq j_{sa}^{ik} + j_{sa} - j_{sa}^{ik} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - j_{sa}^{ik} \wedge l_i + j_{sa} - s = l_s \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3 \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3 \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z S_{j_s^{i s s} j_{i k} j_{s a} j_i} = \sum_{k=1} \sum_{(j_s=j_{i k}+l_s-l_{i k})}^{( )}$$

$$\sum_{j_{i k}=j_{s a}+l_{i k}-l_{s a}} \sum_{(j_{s a}=j_i+l_{s a}-l_i)}^{( )} \sum_{j_i=s+1}^{l_{i k}+j_{s a}^i-s}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_i s=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{i k}=n_i+j_s-j_{i k}-\mathbb{k}_1}$$

$$\sum_{(n_{s a}=n_{i k}+j_{i k}-j_{s a}-\mathbb{k}_2)}^{( )} \sum_{n_s=n_{s a}+j_{s a}^i-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_{i k} + j_{s a}^s - j_s - s - j_{s a}^{i k} - I)!}{(n_i - n - I)! \cdot (n + j_{i k} + j_{s a}^s - j_s - s - j_{s a}^{i k})!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz \cdot S_{j_s, j_{ik}, j_{sa}, j_i}^{iSS} = \sum_{k=1}^{\mathbb{k}} (j_s = j_{ik} + l_{ik})$$

$$= \sum_{j_{sa} = j_{ik} + l_{ik}}^{j_{sa} = j_i} \sum_{l_{ik} = j_{sa} - j_i}^{l_{ik} + j_{sa} - j_i} \sum_{s=1}^{n - j_s + 1} (n_i - j_s + 1)$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}^{(n_i - j_s + 1)}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)}^{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)} \sum_{n_s = n_{sa} + j_{sa} - j_i - \mathbb{k}_3}^{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)}$$

$$\frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - j_s + 1)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_s + j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i}^{iss} = \sum_{k=1}^{()} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()} \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{()} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{()} \sum_{j_i=s+l_{ik}+j_{sa}^{ik}-s}^{l_{ik}+j_{sa}^{ik}-s} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-k_1}^{(n_{ik}=n_{is}-j_{ik}-k_1)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{sa})}^{()} \sum_{(n_{sa}=n_{sa}+j^{sa}-j_i)}^{(n_{sa}=n_{sa}+j^{sa}-j_i)} \frac{(n_i + j_{ik} - j_{sa}^{ik} - s - j_{sa}^{ik} - I)!}{(n_i - n - I)! \cdot (n_{ik} + j_{sa}^{ik} - j_{sa}^{ik} - j_{sa}^{ik})!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > 1 \wedge l_i \leq n + s - n \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq n + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa}^{ik} - j_{sa}^{ik} \leq j_i + j_{sa} - s \wedge j_{sa}^{ik} - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 \leq l_{sa} + j_{sa}^{ik} - j_{sa} \wedge l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$

$((D - n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 7 \wedge s = s + k$

$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$

$D > n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k \wedge$

$k_z: z = 2 \wedge k = k_2 + k_3) \vee$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \vee$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{ISS} = \sum_{k=1} \sum_{(j_s = j_{ik} + l_s - l_{ik})}^{( )}$$

$$\sum_{j_{ik} = j_{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j_{sa} = j_i + j_{sa} - s)}^{( )} \sum_{j_i = s+1}^{l_{ik} + j_{sa}^{ik} - s}$$

$$\sum_{n_i = n+k}^n \sum_{(n_i = n+k - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_i + j_s - j_{ik} - k_1}$$



$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{( )} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3} \frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_s)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_{ik} < n$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - j_{ik} \wedge l_i + j_{sa} - s = l_s \wedge$

$((D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j^i\} \wedge$

$s \geq 7 \wedge s = s + k \wedge$

$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j^i\} \wedge$

$s \geq 6 \wedge s = s + k$

$k_z: z = 2 \wedge k = k_2 + k_3 \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j^i\} \wedge$

$s \geq 6 \wedge s = s + k \wedge$

$k_z: z = 2 \wedge k = k_1 + k_3 \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k \wedge$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z^{S_{j_s^s, j_{ik}, j_{sa}, j_i}} = \sum_{k=1}^{\binom{()}{j_s=j_{ik}+l_s-l_{ik}}} \sum_{j_{ik}=j_{sa}+l_{ik}-l_{sa}}^{\binom{()}{j_{sa}=j_i+l_{sa}-l_i}} \sum_{j_i=s+1}^{l_s+s-1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{\binom{()}{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}} \frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz S_{j_s, j_{ik}, j_{sa}, j_i}^{iSS} = \sum_{k=1}^{\lfloor j_s \rfloor} \binom{j_s}{k} \binom{l_s}{l_s - k} \sum_{i_k=j_{sa}+1}^{j_{sa}+l_s} \binom{n_i - j_s + 1}{n_i - n + \mathbb{k}} \sum_{i_s=j_{sa}+1}^{j_{sa}+l_s} \binom{n_i - j_s + 1}{n_i - n + \mathbb{k}} \sum_{i_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \binom{n_i - j_s + 1}{n_i - n + \mathbb{k}} \sum_{i_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3} \binom{n_i - j_s + 1}{n_i - n + \mathbb{k}} \frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - j_s - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge j_i \leq D + s - n \wedge$$

$$1 - j_s \leq j_s - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{sa} + j_{sa}^{ik} \leq j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - s \wedge j_{sa}^s + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{ISS} = \sum_{k=1}^{( )} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )}$$

$$\sum_{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}^{( )} \sum_{(j_{sa}=j_i+l_{sa}-l_i)}^{( )} \sum_{j_i=s+1}^{l_s+s-1}$$

$$\sum_{n_i=n+lk}^n \sum_{(n_{is}=n+lk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-lk_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-lk_2)}^{( )} \sum_{(n_s=n_{sa}+j_{sa}-j_i)}^{( )}$$

$$\frac{(n_i + j_{ik} - j_{sa} - l_i - s - j_{ik} - I)!}{(n_i - n + I)! \cdot (n_i - j_{ik} + j_{sa} - l_i - s - j_{sa} - j_i)!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_i = 0 + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa}^{ik} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa} \leq j_{sa}^{ik} < j_i + j_{sa} - s \wedge j_{sa}^{ik} - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > 0 \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D - n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \vee$$

$$fz S_{j_s, j_{ik}, j_{sa}, j_i}^{iss} = \sum_{k=1} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik} = j_{sa} + l_{ik} - l_{sa}} \sum_{(j_{sa} = j_i + l_{sa} - l_i)} \sum_{j_i = s+1}^{l_s + s - 1}$$

$$\sum_{n_i = n+k}^n \sum_{(n_{is} = n+k - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{sa}-k_2)}^{( )} \sum_{n_s=n_{sa}+j_{sa}^{sa}-j_i-k_3} \frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_{sa} < n$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > j_{ik} \wedge l_i + j_{sa} - s > l_s \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3 \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3 \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$



$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz \mathcal{D}_{j_s^{l_s}, j_{ik}, j_{sa}, j_i} = \sum_{k=1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )}$$

$$\sum_{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j_{sa}=j_i+j_{sa}-s)}^{( )} \sum_{j_i=s+1}^{l_s+s-1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{( )} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$s \geq 5 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 5 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$

$$fz_{j_s}^{iss} j_{ik} j_{sa}^i = \sum_{k=1}^{\mathbb{k}} (j_s = j_{ik} + \dots + 1)$$

$$\sum_{i_k = j_{sa} + \dots}^{n} \sum_{l_s = j_{sa} + \dots}^{l_s + s - 1} \sum_{i = s+1}^{\dots}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n - \dots - j_s + 1)}^{(n_i - j_s + \dots)}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)}^{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)} \sum_{n_s = n_{sa} + j_{sa} - j_i - \mathbb{k}_3}^{(n_s = n_{sa} + j_{sa} - j_i - \mathbb{k}_3)}$$

$$\frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s \leq D + s - n \wedge$

$1 \leq j_s \leq j_{sa} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{sa} + j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i}^{ISS} = \sum_{k=1}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()} \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{()} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{()} \sum_{j_i=s}^{l_s+s-1} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-k_1}^{(n_i-j_s+1)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{n_{sa}=n_{sa}+j^{sa}-j_i}^{(n_i-j_s+1)} \frac{(n_i + j_{ik} - j_{sa} - s - j_{ik} - I)!}{(n_i - n - I)! \cdot (n_{ik} + j_{sa} - j_{sa} - j_{ik})!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > 1 \wedge l_s \leq n - n + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \wedge j_i + j_{sa} - s \wedge j^{sa} - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_{sa} + j_{sa}^{ik} - j_{sa} \wedge l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$((D - n < n \wedge I = l_s > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 7 \wedge s = s + k$

$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$

$D > n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k \wedge$

$k_z: z = 2 \wedge k = k_2 + k_3) \vee$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \vee$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{ISS} = \sum_{k=1} \sum_{(j_s = j_{ik} + l_s - l_{ik})}^{( )}$$

$$\sum_{j_{ik} = j_{sa} + l_{ik} - l_{sa}} \sum_{(j_{sa} = j_{sa} + 1)}^{(l_i + j_{sa} - s)} \sum_{j_i = j_{sa} + l_i - l_{sa}}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{( )} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3} \frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_s)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_{ik} < n$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - j_{ik} \wedge l_i + j_{sa} - s = l_s \wedge$

$((D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j^i\} \wedge$

$s \geq 7 \wedge s = s + k \wedge$

$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k$

$k_z: z = 3 \wedge k = k_2 + k_3 \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k \wedge$

$k_z: z = 2 \wedge k = k_1 + k_3 \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k \wedge$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{l_s} = \sum_{k=1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )}$$

$$\sum_{j_{ik}=j_{sa}^{l_{ik}}+l_{sa}} \sum_{(j_{sa}=j_{sa}+1)}^{(l_{sa})} \sum_{j_i=j_{sa}^{l_{ik}}+l_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{( )} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$



$$D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$



$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{ISS} = \sum_{k=1}^{( )} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )}$$

$$\sum_{j_{ik}=j_{sa}+l_{ik}-l_{sa}}^{(l_{ik}+j_{sa}^{ik}-s)} \sum_{(j_{sa}=j_{sa}+1)} \sum_{j_i=j_{sa}+l_i-1}^{( )}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-k_1}^{( )}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-1)}^{( )} \sum_{(n_s=n_{sa}+j_{sa}-j_i)}^{( )}$$

$$\frac{(n_i + j_{ik} - j_{sa} - s - j_{ik} - 1)!}{(n_i - n + 1)! \cdot (n_i + j_{ik} + j_{sa} - j_i - s - j_{sa} - 1)!}$$

$$\frac{(l_s - 2)!}{(n - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_i = n + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq n + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa}^{ik} \leq j_{ik} \leq j_i + j_{sa} - s \wedge j_{sa}^{ik} - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = n \wedge l_{sa} + j_{sa}^{ik} - j_{sa}^{ik} \wedge l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$((D - n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

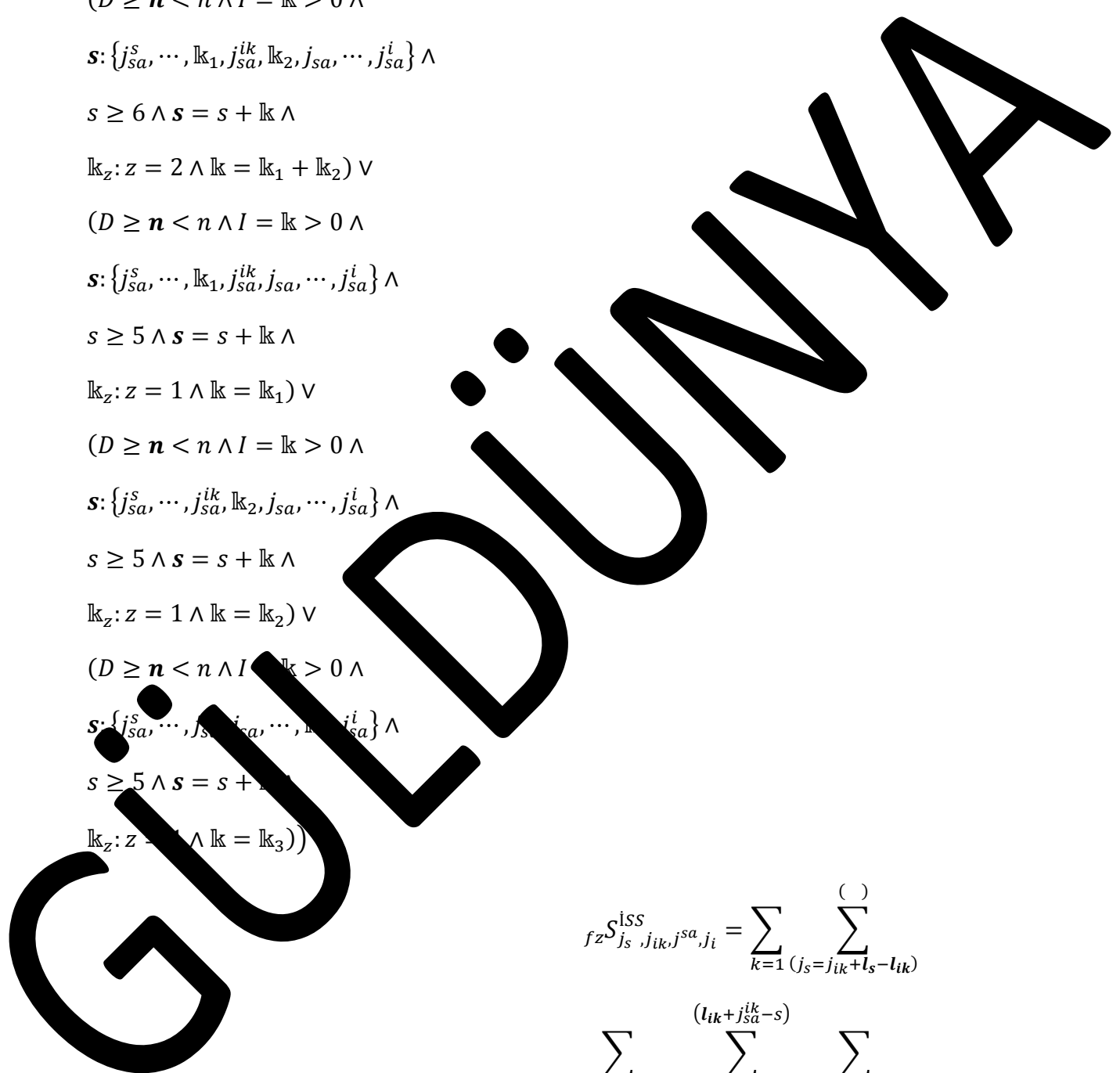
$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3))$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{iss} = \sum_{k=1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )}$$

$$\sum_{j_{ik}=j_{sa}+l_{ik}-l_{sa}} \sum_{(l_{ik}+j_{sa}^i-s)}^{(l_{ik}+j_{sa}^i-s)} \sum_{(j_{sa}=j_{sa}+1)} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}$$



$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{sa}-k_2)}^{( )} \sum_{n_s=n_{sa}+j_{sa}^{sa}-j_i-k_3} \frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_{sa} \leq j_{sa}^{ik} + j_{sa} - j_{ik}$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > j_{ik} \wedge l_i + j_{sa} - s = l_s \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3 \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3 \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z \mathcal{S}_{j_s}^{l_s} j_{ik} j_{sa} j_i = \sum_{k=1}^{(\quad)} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\quad)}$$

$$\sum_{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}^{(l_{ik}+j_{sa}^{ik}-s)} \sum_{(j_{sa}=j_{sa}+1)} \sum_{j_i=j_{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(\quad)} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$



$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$\begin{aligned} & f z^{\mathbb{k} s s} \sum_{j_s=j_{ik}+l_s-l_{ik}} \sum_{j_{ik}=j_{sa}^{ik}-j_{sa}} \sum_{j_i=j_{sa}^i+s-j_{sa}} \sum_{n_i=n_{is}+j_s+1} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3} \\ & \frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!} \cdot \\ & \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\ & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \end{aligned}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i}^{l_{ss}} = \sum_{k=1}^{()} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()} \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{(l_s+j_{sa}-1)} \sum_{(j^{sa}=j_{sa}+1)}^{(l_s+j_{sa}-1)} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{(l_s+j_{sa}-1)} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \frac{(n_i - j_{ik} + j_{sa} - j_s - s - j_{sa})!}{(n_i - n - l)! (n + j_{ik} - j_{sa} - j_s - s - j_{sa})!} \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + \dots - n \wedge$

$1 \leq j_{ik} \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_i \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} + j^{sa} \leq j_i \leq j_{sa} - s + j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge j_{sa}^{ik} + j_{sa}^{ik} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$

$(D \geq n < n \wedge I = \mathbb{k} > 0) \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 7 \wedge s = s + \mathbb{k} \wedge$

$z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \vee$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{ISS} = \sum_{k=1} \sum_{(j_s = j_{ik} + l_s - l_{ik})}^{( )}$$

$$\sum_{j_{ik} = j_{sa} + l_{ik} - l_{sa}} \sum_{(j_{sa} = j_{sa} + 1)}^{(l_s + j_{sa} - 1)} \sum_{j_i = j_{sa} + s - j_{sa}}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{( )} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3} \frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_{ik} < n$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > j_{ik} \wedge l_i + j_{sa} - s = l_s \wedge$

$((D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j^i\} \wedge$

$s \geq 7 \wedge s = s + k \wedge$

$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k$

$k_z: z = 2 \wedge k = k_2 + k_3 \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k \wedge$

$k_z: z = 2 \wedge k = k_1 + k_3 \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k \wedge$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z \mathcal{D}_{j_s^s, j_{ik}, j_{sa}, j_i}^{l_s} = \sum_{k=1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )}$$

$$\sum_{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j_{sa}=j_{sa}+1)}^{(l_s+j_{sa}-1)} \sum_{j_i=j_{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{( )} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz_{j_s}^{iSS} j_{ik} j_{sa}^i = \sum_{k=1}^{\lfloor \frac{(l_s + j_{sa})}{j_{sa}} \rfloor} \sum_{(j_{sa}=j_{sa})} \sum_{(l_i=l_{sa})} \sum_{(n_i=n+\mathbb{k} \ (n_{is}=n_{is}-j_s+1) \ n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2) \ n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3} \frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{sa} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$



$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{ISS} = \sum_{k=1}^{( )} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )}$$

$$\sum_{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}^{(l_s+j_{sa}-1)} \sum_{(j_{sa}=j_{sa}+1)}^{( )} \sum_{j_i=j_{sa}+s-j_{ik}}^{( )}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-k_1}^{( )}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-1)}^{( )} \sum_{(n_s=n_{sa}+j_{sa}-j_i)}^{( )}$$

$$\frac{(n_i + j_{ik} - j_{sa} - s - j_{ik} - I)!}{(n_i - n + I)! \cdot (n_i + j_{ik} + j_{sa} - j_i - s - j_{sa} - j_{ik})!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_i = 2 + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa}^{ik} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa}^{ik} \leq j_{sa}^{ik} < j_i + j_{sa} - s \wedge j_{sa}^{ik} - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > 0 \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$((D - n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \vee$$

$$fz S_{j_s, j_{ik}, j_{sa}, j_i}^{iss} = \sum_{k=1} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{( )}$$

$$\sum_{j_{ik} = j_{sa} + l_{ik} - l_{sa}} \sum_{(j_{sa} = j_{sa} + 1)}^{(l_s + j_{sa} - 1)} \sum_{j_i = j_{sa} + s - j_{sa}}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{( )} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3} \frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_s)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_{sa} \leq j_{sa}^{ik} + j_{sa} - j_{ik} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > j_{ik} \wedge l_i + j_{sa} - s = l_s \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_2 + k_3 \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_3 \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{l_s} = \sum_{k=1}^{()} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik} = j_{sa} + j_{sa}^{ik} - j_{sa}}^{(l_s + j_{sa} - 1)} \sum_{(j_{sa} = j_{sa} + 1)} \sum_{j_i = j_{sa} + l_i - l_{sa}}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)}^{()} \sum_{n_s = n_{sa} + j_{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz^{\text{ISS}} \sum_{j_s, j_{ik}, j_{sa}, j_i} \sum_{\mathbb{k}} (j_s = j_{ik} + l_s - l_{ik})$$

$$\sum_{j_{ik} = j_{sa}^{ik} - s}^{l_s + j_{sa}^{ik} - s} (j_{sa} = j_{ik} - l_{ik}) j_i = j_{sa} + l_i - l_{sa}$$

$$\sum_{n_i = \mathbb{k}}^n (n_i + 1) \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2} (n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$



$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$

$$fz S_{j_s}^{lss} j_{ik} j^{sa} j_i = \sum_{k=1} \sum_{(j_s=j_{ik}+l_s-l_{ik})} \sum_{(j_{sa}=j_{ik}+l_{sa}-l_{ik})} \sum_{(j_i=j^{sa}+l_i-l_{sa})} \sum_{(n_i=n+l_k)} \sum_{(n_{is}=n+l_k-j_s+1)} \sum_{(n_{ik}=n+l_k-l_{ik})} \sum_{(n_{sa}=n+l_k-l_{sa})} \sum_{(n_s=n+l_k-j_s-l_{sa})} \frac{(n_i - n - l)! \cdot (n + j_{ik} - j_s - s - j_{sa}^{ik})!}{(n_i - n - l)! \cdot (n + j_{ik} - j_s - s - j_{sa}^{ik})!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + \dots = n \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} = j^{sa} \leq j_i - j_{sa} - s = j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{ik}^{ik} + 1 = l_s \wedge j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$

$((D \geq n \wedge I = \mathbb{k} > 0) \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_1, j_{sa}^{l_2}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^l\} \wedge$

$s \geq 7 \wedge s = s + \mathbb{k} \wedge$

$(\mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^l\} \wedge$

$s \geq 6 \wedge s = s + \mathbb{k} \wedge$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\}$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_1, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \Rightarrow$$

$$f_z^{ISS} j_s, j_{ik}, j^{sa}, j_i = \sum_{k=1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{( )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{i_s}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{i_s}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_2}$$

$$\frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!}$$

$$\frac{(l_s - 1)!}{(l_s - 1)! \cdot (l_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - l_i - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} - j_{sa}^{ik} - j_{sa}$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j_i + s - j_{sa} \leq j_i - n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_i = l_{ik} \wedge l_{sa} - j_{sa} - s = l_s \wedge$

$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 7 \wedge s = s + \mathbb{k}$

$\mathbb{k}_2: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_2: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_2: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{iSS} = \sum_{k=1} \sum_{(j_s = j_{ik} + l_s - l_{ik})}^{( )}$$

$$\sum_{j_{ik} = j_{sa}^{ik} + 1}^{l_{ik}} \sum_{(j_{sa} = j_{ik} + l_{sa} - l_{ik})}^{( )} \sum_{j_i = j_{sa} + l_i - l_{sa}}$$

$$\sum_{n_i = \mathbf{n} + \mathbb{k}}^n \sum_{(n_{is} = \mathbf{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)}^{( )} \sum_{n_s = n_{sa} + j_{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - \mathbf{n} - I)! \cdot (\mathbf{n} + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!}.$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$\begin{aligned} S_{j_s, j_{ik}}^{ISS} &= \sum_{k=1}^{( )} (j_s = j_{ik} + l_s - l_{ik}) \\ \sum_{j_{sa}^{ik}+1}^{l_{ik}} (j_{sa}^{ik} + l_s - l_{ik}) & \sum_{j_i = j_{sa} + s - j_{sa}}^{( )} \\ \sum_{n+l_k}^n (n_{is} = n+l_k - j_s + 1) & \sum_{n_{ik} = n_{is} + j_s - j_{ik} - l_{k_1}}^{(j_s+1)} \\ \sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - l_{k_2})}^{( )} & \sum_{n_s = n_{sa} + j_{sa} - j_i - l_{k_3}} \\ \frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!} & \\ \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} & \\ \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} & \end{aligned}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$f_z S_{j_s}^{iSS} j_{ik}, j^{sa}, j_i = \sum_{k=1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{( )} \sum_{j_i=l_i+l_s-l_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\frac{(n_i + j_{ik} + j_{sa}^{ik} - j_s - j_{sa}^{ik} - 1)!}{(n_i - 1)! \cdot (n_{ik} + j_{sa}^{ik} - j_s - s - j_{sa}^{ik})!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - 1$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s \leq j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} - j_{sa}^{ik} - j_{sa}^{ik} \leq j^{sa} + j_i + j_{sa}^{ik} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$j_{ik} - j_{sa}^{ik} - 1 = l_s \wedge l_{sa} \wedge j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$((D > n < n \wedge l_s > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$



$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_1, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3)) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i}^{iss} = \sum_{k=1}^{( )} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )}$$

$$\sum_{j_{ik}=j_{sa}^{lk}+1}^{l_{ik}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{( )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{i_s}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{i_k}=n_{i_s}+j_s-j_{i_k}-\mathbb{k}_1} \sum_{(n_{s_a}=n_{i_k}+j_{i_k}-j^{s_a}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{s_a}+j^{s_a}-j_i-\mathbb{k}_2} \frac{(n_i + j_{i_k} + j_{s_a}^s - j_s - s - j_{s_a}^{i_k} - I)!}{(n_i - n - I)! \cdot (n + j_{i_k} + j_{s_a}^s - j_s - s - j_{s_a}^{i_k})!} \cdot \frac{(l_s - 1)!}{(l_s - 1)! \cdot (l_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - l_i - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{i_k} - j_{s_a}^{i_k} + 1 \wedge j_s + j_{s_a}^{i_k} - 1 \leq j_{i_k} \leq j^{s_a} - j_{s_a}^{i_k} - j_{s_a}$$

$$j_{i_k} + j_{s_a} - j_{s_a}^{i_k} \leq j^{s_a} \leq j_i + j_{s_a} - s \wedge j_i + s - j_{s_a} \leq j_{i_k} < n \wedge$$

$$l_{i_k} - j_{s_a}^{i_k} + 1 = l_s \wedge l_{s_a} + j_{s_a}^{i_k} - j_i - s = l_{i_k} \wedge l_{s_a} + j_{s_a} - s = l_{i_k} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{s_a}^s, \dots, \mathbb{k}_1, j_{s_a}^{i_k}, \mathbb{k}_2, j_{s_a}, \dots, \mathbb{k}_3, j_{s_a}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_2: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{s_a}^s, \dots, j_{s_a}^{i_k}, \mathbb{k}_2, j_{s_a}, \dots, \mathbb{k}_3, j_{s_a}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_2: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{s_a}, \dots, \mathbb{k}_1, j_{s_a}^{i_k}, j_{s_a}, \dots, \mathbb{k}_3, j_{s_a}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_2: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{iss} = \sum_{k=1} \sum_{(j_s = j_{ik} + l_s - l_{ik})}^{( )}$$

$$\sum_{j_{ik} = j_{sa}^{ik} + 1}^{l_s + j_{sa}^{ik} - 1} \sum_{(j^{sa} = j_{ik} + l_{sa} - l_{ik})}^{( )} \sum_{j_i = j^{sa} + l_i - l_{sa}}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{( )} \sum_{n_s = n_{sa} + j^{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

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$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$\begin{aligned} S_{j_s, j_{ik}}^{ISS} &= \sum_{k=1}^{( )} (j_s = j_{ik} + l_s - l_{ik}) \\ \sum_{j_{sa}^{ik}+1}^{l_s + j_{sa}^{ik} - 1} (j_{sa}^{ik} + l_s - l_{ik}) &= \sum_{j_i = j_{sa} + s - j_{sa}} \\ \sum_{n+l_k}^n (n_{is} = n + l_k - j_s + 1) &= \sum_{n_{ik} = n_{is} + j_s - j_{ik} - l_{k1}} \\ \sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - l_{k2})}^{( )} &= \sum_{n_s = n_{sa} + j_{sa} - j_i - l_{k3}} \\ \frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!} & \cdot \\ \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} & \cdot \\ \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} & \end{aligned}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{iSS} = \sum_{k=1} \sum_{(j_s=j_{ik}+l_s-l_{sa})}^{( )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-1} \sum_{(j_{sa}=j_{ik}+j_{sa}^{ik}-j_{sa})}^{( )} \sum_{(j_i=j_{sa}^{ik}-l_{sa})}^{( )}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{ik}=j_s-j_{ik}-\mathbb{k}_1)}^{( )}$$

$$\sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k}_2)}^{( )} \sum_{(n_{sa}+j_{sa}^{ik}-j_i-\mathbb{k}_3)}^{( )}$$

$$\frac{(j_s + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - l)!}{(n_s - n)! \cdot (n + j_{sa}^{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s = 1 \wedge l_i = D + s - 1 \wedge$$

$$1 \leq j_{ik} - j_{sa}^{ik} + j_s + j_{sa} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq j_{sa} + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s - j_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_1, j_{sa}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

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$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

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$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3)) \Rightarrow$$

$$fz S_{j_s, j_{ik}, j_{sa}, j_i}^{ISS} = \sum_{k=1} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{( )}$$



$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{(n_s=n_{sa}+j^{sa}-j_i-l_{k_3})}$$

$$\frac{(n_i + j_{ik} + j_{sa}^s - j_s - j_{ik} - j_{sa}^{ik})!}{(n_i - n - l)! \cdot (n + j_{ik} + j_{sa}^s - j_s - j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(l_s - 2)!}{(l_s - j_i - 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{ik} \leq j_{sa}^{ik} + j_{sa} - j_{sa}^{ik} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + j_{sa} - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa}^{ik} > l_{ik} \wedge l_{sa} + j_{sa} - s > l_{sa} \wedge$

$((D \geq n < n \wedge l_i = l_k > 0 \wedge$

$s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, l_{k_2}, j_{sa}, \dots, l_{k_3}, j_{sa}^i\}$

$s \geq 6 \wedge s = s + l_k \wedge$

$l_z: z = 2 \wedge l_k = l_{k_1} + l_{k_2} + l_{k_3}) \vee$

$(D \geq n < n \wedge l_i = l_k > 0 \wedge$

$s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, l_{k_2}, j_{sa}, \dots, l_{k_3}, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + l_k \wedge$

$l_z: z = 2 \wedge l_k = l_{k_2} + l_{k_3}) \vee$

$(D \geq n < n \wedge l_i = l_k > 0 \wedge$

$s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, j_{sa}, \dots, l_{k_3}, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + l_k \wedge$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\}$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \vee$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{iSS} = \sum_{k=1} (j_s = j_{ik} + l_s - l_{ik}) \sum_{( )}$$

$$\sum_{j_{ik} = j_{sa}^{ik} + 1}^{l_s + j_{sa}^{ik} - 1} \sum_{( )} \sum_{j_i = j_{sa}^{sa} + s - j_{sa}} (j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_i - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)}^{( )} \sum_{n_s = n_{sa} + j_{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - l_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\}) \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

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$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$f_z S_{j_s, j_{ik}}^{ISS} j_i = \sum_{k=1}^{(\cdot)} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\cdot)}$$

$$\sum_{k=j_{sa}^{ik} + 1}^{l_s + j_{sa}} \sum_{(j_{sa} = j_{ik} + l_{sa} - l_{ik})}^{(\cdot)} \sum_{j_i = j_{sa} + s - j_{sa}}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)}^{(\cdot)} \sum_{n_s = n_{sa} + j_{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{ISS} = \sum_{(j_s=j_{ik}+j_{sa}^{ik}+1)}^{( )} \sum_{j_{ik}=j_{sa}^{ik}-1}^{l_s+j_{sa}^{ik}-1} \sum_{j_{sa}=j_{sa}^{ik}+j_{sa}-j_{sa}^{ik}}^{(n_i-1)} \sum_{n_i=n+\mathbb{k}}^{(n_i+n+\mathbb{k}-j_s+1)} \sum_{(n_s=n_{sa}+j_{sa}^{ik}-\mathbb{k}_2)}^{(n_s=n_{sa}+j_{sa}^{ik}-\mathbb{k}_3)} \frac{(n_i+j_{ik}+j_{sa}^s-j_s-s-j_{sa}^{ik}-I)!}{(n_i-n+I)! \cdot (n+j_{ik}+j_{sa}^s-j_s-s-j_{sa}^{ik})!} \cdot \frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!} \cdot \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_i \leq D - n + 1 \wedge$$

$$1 \leq j_{ik} - j_{sa}^{ik} - 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} - 1 \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$j_{sa}^{ik} - 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz_{j_s, j_{ik}, j_{sa}, j_i}^{ISS} = \sum_{k=1}^{(l_i-s+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s}^{( )} \sum_{(j_{sa}=j_{ik}+l_{sa}-l_{ik})}^{( )} \sum_{j_i=j_{sa}+l_i-l_{sa}}^{( )}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-k_1}^{( )}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa})}^{( )} \sum_{n_s=n_{sa}+j_{sa}-j_{sa}}^{( )}$$

$$\frac{(n_i + j_{ik} - j_s - s - j_{sa} - l_{sa} - l_{ik} - I)!}{(n_i - n - I)! \cdot (n_{is} - j_{ik} - j_{sa} - l_{sa} - s - j_{sa})!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s = 0 - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa} = 1 \leq j_{ik} \leq j_{sa}^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - s \wedge j_{sa} + j_{sa} - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 \leq l_{sa} - j_{sa}^{sa} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D - n < n \wedge I = k > 0 \wedge$$

$$\{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}^i, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}^i, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$



$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

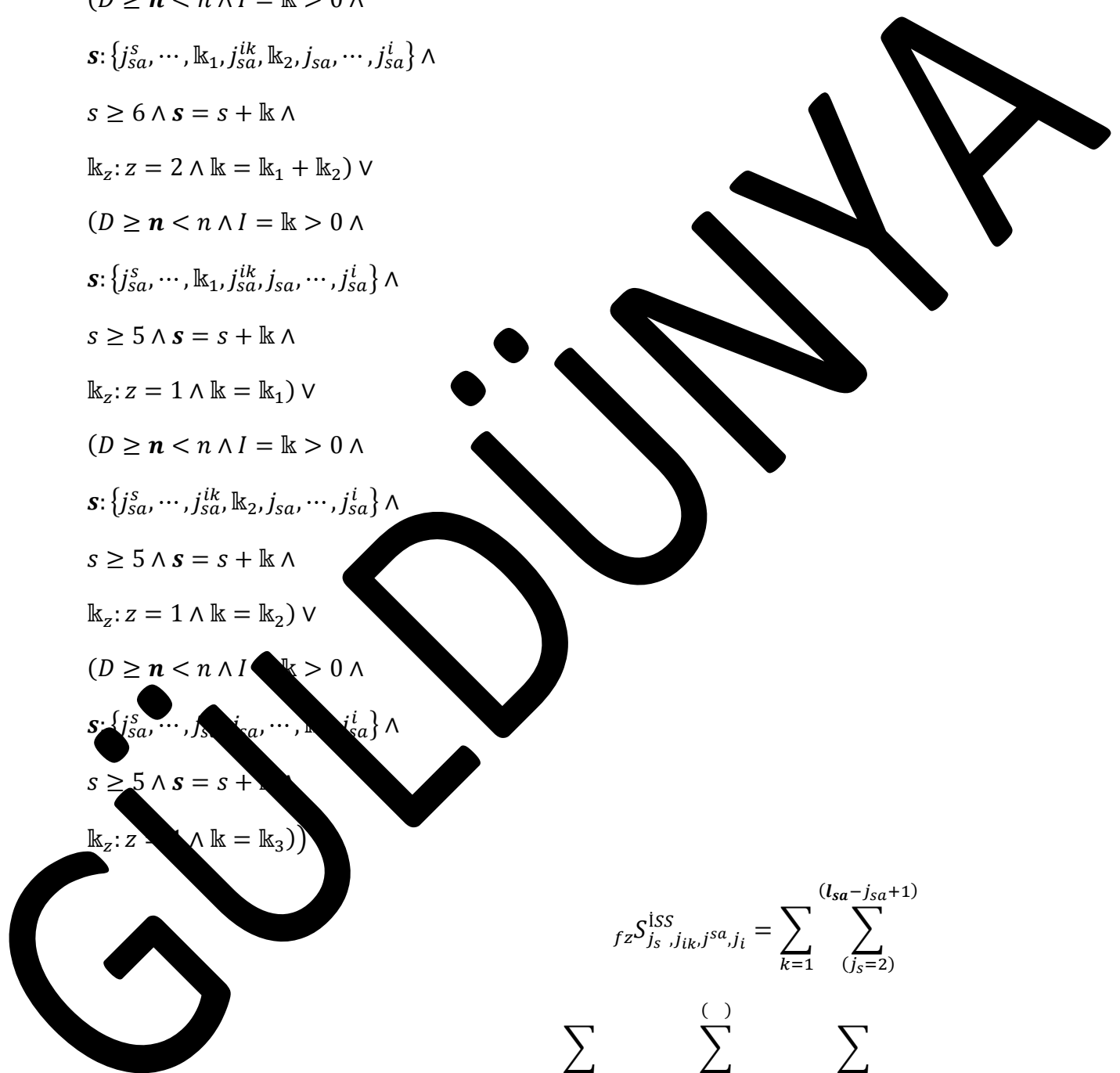
$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3))$$

$$fz S_{j_s, j_{ik}, j_{sa}, j_i}^{iss} = \sum_{k=1} \sum_{(j_s=2)}^{(l_{sa}-j_{sa}+1)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s} \sum_{(j_{sa}=j_{ik}+l_{sa}-l_{ik})}^{( )} \sum_{j_i=j_{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}$$



$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{sa}-k_2)}^{( )} \sum_{n_s=n_{sa}+j_{sa}^{sa}-j_i-k_3} \frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_{sa} < n$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_s \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3 \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3 \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz_{j_s, j_{ik}, j_{sa}, j_i}^{s, s, s} = \sum_{k=1}^{(l_{sa}-j_{sa}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s}^{()} \sum_{(j_{sa}=j_{ik}+l_{sa}-l_{ik})}^{()} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz_{j_s, j_{ik}^{sa}, j_i}^{iss} = \sum_{k=1}^{\mathbb{k}} \sum_{l_s=0}^{(j_{sa}^{ik}+1)} \sum_{l_{ik}=l_s}^{(j_{ik}^{sa}+1)} \sum_{l_i=l_s}^{(j_i+1)} \sum_{n_i=n+\mathbb{k}}^n \sum_{n_{is}=n_{is}-j_s+1}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(n_i-j_s+1)} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}^{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)} \frac{(n_{ik}+j_{ik}+j_{sa}^s-j_s-s-j_{sa}^{ik}-I)!}{(n_{ik}-I)! \cdot (n+j_{ik}+j_{sa}^s-j_s-s-j_{sa}^{ik})!} \cdot \frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!} \cdot \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!}$$

$$D \geq n < n \wedge l_s \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{sa} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \dots) \vee$$

$$(D \geq \dots < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq \dots = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \dots = \mathbb{k}_2) \vee$$

$$(D \geq \dots < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i}^{ISS} = \sum_{k=1}^{(l_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}^{(l_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s}^{( )} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{( )} \sum_{j_i=j^{sa}+s-j_{ik}}^{( )}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-l_{k1}}^{( )}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{sa})}^{( )} \sum_{(n_s=n_{sa}+j^{sa}-j_i)}^{( )}$$

$$\frac{(n_i + j_{ik} - j^{sa} - l_{sa} - s - j_{ik} - l_{k1})!}{(n_i - n + l_k)! \cdot (n_{is} - j_s + 1)! \cdot (n_{ik} - n_{is} - j_{ik} - l_{k1})!}$$

$$\frac{(l_s - 2)!}{(j_s - 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_i = l_s + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq l_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa} \leq j_i \leq j_i + j_{sa} - s \wedge l_{sa} - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_{sa} + j_{sa}^{ik} - j_{sa} \wedge l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D - n < n \wedge I = l_k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, l_{k2}, j_{sa}, \dots, l_{k3}, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + l_k \wedge$$

$$l_{kz}: z = 3 \wedge l_k = l_{k1} + l_{k2} + l_{k3}) \vee$$

$$(D \geq n < n \wedge I = l_k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, l_{k2}, j_{sa}, \dots, l_{k3}, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + l_k \wedge$$

$$l_{kz}: z = 2 \wedge l_k = l_{k2} + l_{k3}) \vee$$

$$(D \geq n < n \wedge I = l_k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{iss} = \sum_{k=1}^{(l_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s}^{( )} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j_{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}$$



$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{( )} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3} \frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_{sa} \leq j_{ik} - j_{sa}^{ik} + 1 = l_s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > j_{ik} \wedge l_i + j_{sa} - s > l_s \wedge$

$((D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j^i\} \wedge$

$s \geq 7 \wedge s = s + k \wedge$

$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k \wedge$

$k_z: z = 2 \wedge k = k_2 + k_3 \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k \wedge$

$k_z: z = 2 \wedge k = k_1 + k_3 \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k \wedge$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z^{S^{lss}}_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=1}^{(l_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s}^{()} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz_{j_s, j_{ik}, j_{sa}, j_i}^{l_s} = \sum_{k=1}^{(l_s)} \sum_{(j_s=2)}^{(l_s)}$$

$$j_{ik} = j_s + l_{ik} \quad (j^{sa} = j_{ik} - l_{ik}) \quad j_i = j^{sa} + l_i - l_{sa}$$

$$\sum_{n_i=1}^n \sum_{(n_i=i+1)}^{(n_i=i+1)} \sum_{n_{ik}=1}^{(n_{ik}=n+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq l_s - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$f_z^{S^{lSS}} j_s, j_{ik}, j^{sa}, j_i = \sum_{k=1}^{(l_s)} \sum_{(j_s=2)}^{(l_s)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s}^{( )} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{( )} \sum_{j_i=j^{sa}+s-j_{sa}}^{( )}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{(n_{sa}=n_{is}-l_{sa}+l_{ik})}^{( )} \sum_{(n_{sa}=n_{is}-l_{sa}+l_{ik})}^{( )} \sum_{(n_{sa}=n_{is}-l_{sa}+l_{ik})}^{( )}$$

$$\frac{(n_i - j_{ik} + j_{sa} - j_s - s - j_{sa})!}{(n_i - n - l) \cdot (n + j_{ik} - j_{sa} - j_s - s - j_{sa})!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + \dots - n \wedge$$

$$1 \leq j_{ik} \leq j_{ik} - j_{sa} + \dots \wedge j_s + j_{sa} - 1 \leq j_i \leq j^{sa} + j_{sa} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa} - j_{sa} \leq j_i \leq j_{sa} - s + j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa} + 1 = l_s \wedge j_{sa} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0) \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k \wedge$

$k_z: z = 2 \wedge k = k_1 + k_3) \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k \wedge$

$k_z: z = 2 \wedge k = k_1 + k_2) \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 5 \wedge s = s + k \wedge$

$k_z: z = 1 \wedge k = k_1) \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 5 \wedge s = s + k \wedge$

$k_z: z = 1 \wedge k = k_2) \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

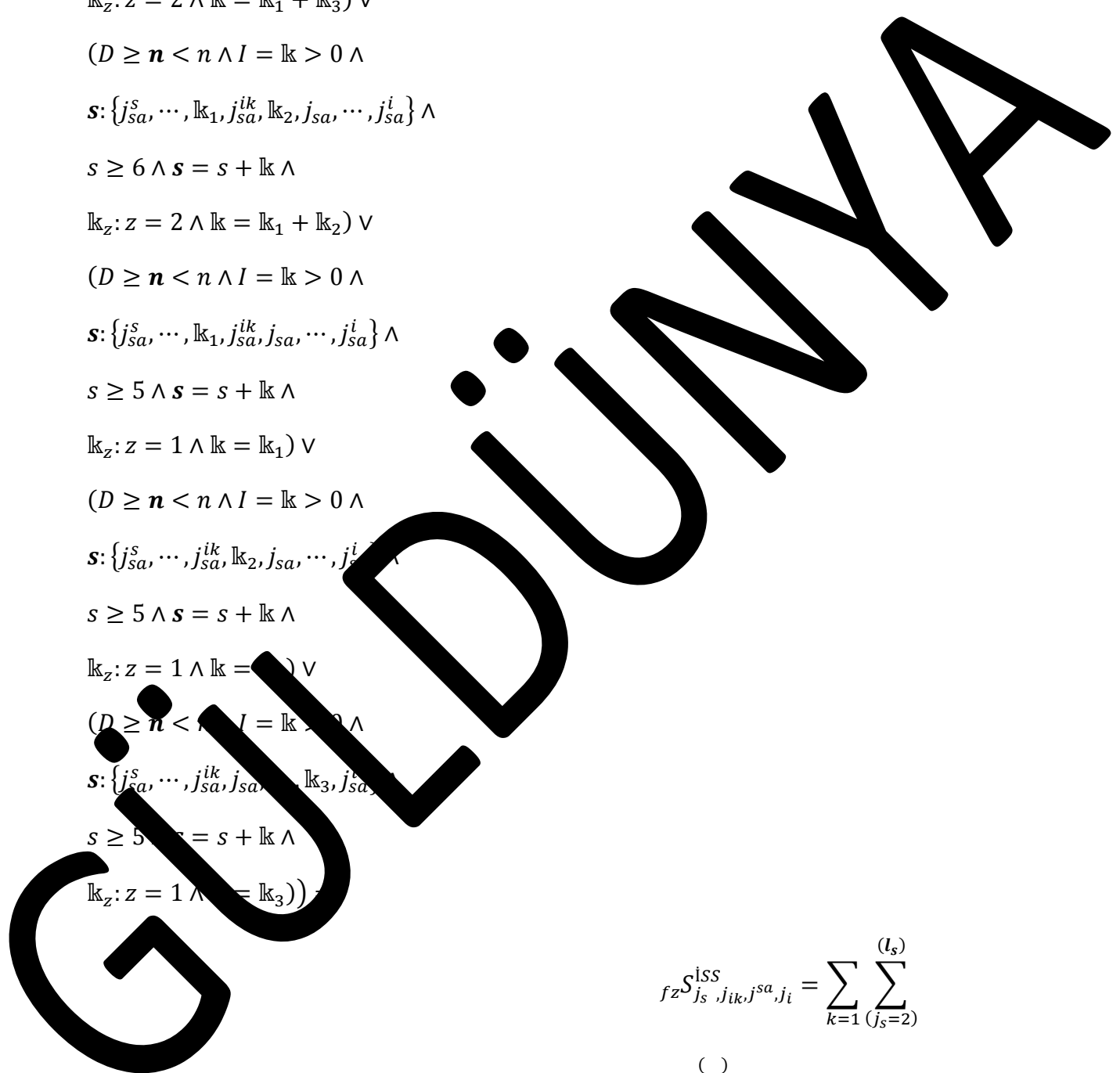
$s \geq 5 \wedge s = s + k \wedge$

$k_z: z = 1 \wedge k = k_3) \vee$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{ISS} = \sum_{k=1} \sum_{(j_s=2)}^{(l_s)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{( )} \sum_{j_i=j_{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}$$



$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{sa}-k_2)}^{( )} \sum_{n_s=n_{sa}+j_{sa}^{sa}-j_i-k_3} \frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_{sa} < n$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - j_{ik} \wedge l_i + j_{sa} - s = l_s \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3 \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3 \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$



$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{ISS} = \sum_{k=1}^{(l_s)} \sum_{(j_s=2)}^{(l_s)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{( )} \sum_{(j_{sa}=j_{ik}+l_{sa}-l_{ik})}^{( )} \sum_{j_i=j_{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_i=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_i+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{( )} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z S^{l_s} j_{ik} j_{sa}^{s-l_s} \sum_{k=2}^{(l_s)} \sum_{i=0}^{(n)} \sum_{j=0}^{(n-i)} \sum_{l=0}^{(n-i-j)} \sum_{m=0}^{(n-i-j-l)} \sum_{n_i=n+l}^{(n-i-j-s+1)} \sum_{n_{is}=n-i-j-s+1}^{(n-i-j-s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3} \frac{(n_{ik}+j_{ik}+j_{sa}^s-j_s-s-j_{sa}^{ik}-I)!}{(n_{ik}-I)! \cdot (n+j_{ik}+j_{sa}^s-j_s-s-j_{sa}^{ik})!} \cdot \frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!} \cdot \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!}$$

$$D \geq n < n \wedge l_s \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{sa} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{sa} + j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \Rightarrow$$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i}^{iSS} = \sum_{k=1} \sum_{(j_s=2)}^{(l_s)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})} \sum_{j_i=j^{sa}+s-j_{ik}} \sum_{n_i=n+l_k}^{(n_i-j_s+1)} \sum_{(n_{is}=n+l_k-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-l_{k1}} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k2})} \sum_{(n_s=n_{sa}+j^{sa}-j_i)} \frac{(n_i + j_{ik} - j_i - s - j_{ik} - l_{k1})!}{(n_i - l_{k1})! \cdot (n_i + j_{ik} + j_{sa} - j_i - s - j_{sa} - l_{k1})!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_i = l_s + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_s + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa} \leq j_i \leq j_i + j_{sa} - s \wedge j_{sa}^{ik} - j_{sa} \leq j_i \leq n \wedge$$

$$l_{k1} - j_{sa}^{ik} + 1 \leq l_{k2} \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D - n < n \wedge I = l_k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, l_{k2}, j_{sa}, \dots, l_{k3}, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + l_k$$

$$l_{kz}: z = 3 \wedge l_k = l_{k1} + l_{k2} + l_{k3}) \vee$$

$$(D \geq n < n \wedge I = l_k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, l_{k2}, j_{sa}, \dots, l_{k3}, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + l_k \wedge$$

$$l_{kz}: z = 2 \wedge l_k = l_{k2} + l_{k3}) \vee$$

$$(D \geq n < n \wedge I = l_k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{iSS} = \sum_{k=1} \sum_{(j_s=2)}^{(I_s)}$$

$$\sum_{j_{ik}=j_s+j_{sa}-1} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{( )} \sum_{j_i=j_{sa}+I_i-l_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3} (n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)! / ((n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!)$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_{ik} < n$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - j_{ik} \wedge l_i + j_{sa} - s > l_s \wedge$

$D + s - n < l_i \leq D + l_s + s - n - 1$

$((D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 7 \wedge s = s + k \wedge$

$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 6, s = s + k \wedge$

$k_z: z = 2 \wedge k = k_2 + k_3) \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 5, s = s + k \wedge$

$k_z: z = 2 \wedge k = k_1 + k_3) \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$$s \geq 6 \wedge \mathbf{s} = \mathbf{s} + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = \mathbf{s} + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = \mathbf{s} + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = \mathbf{s} + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{ISS} = \sum_{k=1}^{(\cdot)} \sum_{(j_s = j_{ik} + l_s - l_{ik})}^{(\cdot)}$$

$$\sum_{j_{ik} = j_{sa} + l_{ik} - l_{sa}}^{(\cdot)} \sum_{(j_{sa} = j_i + j_{sa} - s)}^{(\cdot)} \sum_{j_i = l_i + n - D}^{l_{sa} + s - j_{sa}}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)}^{(\cdot)} \sum_{n_s = n_{sa} + j_{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

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$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz \rightarrow j_{sa}^{ik} = \sum_{l_i=0}^{(n_i - j_{sa}^{ik})} \sum_{l_s=0}^{(l_i + l_s - l_{ik})} \sum_{l_{ik}=0}^{(l_i + s - j_{sa}^{ik})} \sum_{j_{ik}=j_{sa}^{ik} + l_{ik} - l_i}^{(j_{sa}^{ik} + l_{ik} - l_i)} \sum_{j_{sa}=j_i + j_{sa} - s}^{(j_{sa}^{ik} + l_{ik} - l_i)} \sum_{j_i=l_i + n - D}^{(n_i - j_{sa}^{ik})} \sum_{l_{ik}=n + \mathbb{k}}^{(n_{is} = n + \mathbb{k} - j_s + 1)} \sum_{n_{ik}=n_{is} + j_s - j_{ik} - \mathbb{k}_1}^{(n_i - j_{sa}^{ik})} \sum_{(n_{sa}=n_{ik} + j_{ik} - j_{sa}^{ik} - \mathbb{k}_2)}^{(n_{sa} = n_{sa} + j_{sa} - j_i - \mathbb{k}_3)} \frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$f_z S_{j_s}^{iSS} j_{ik}, j^{sa}, j_i = \sum_{k=1} \sum_{(j_s=j_{ik}+l_s-l_k)}^{( )} \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{( )} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{( )} \sum_{l_i+n-D}^{l_{ik}+s-j_s} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})} \frac{(n_i+j_{ik}+j_{sa}^{ik}-j_s-j_{sa}^{ik}-I)!}{(n_i+n-I)! \cdot (n_{ik}+j_{sa}^{ik}-j_s-s-j_{sa}^{ik})!} \cdot \frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!} \cdot \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s \leq j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa}^{ik} \leq j^{sa} + j_i + j_{sa}^{ik} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} = l_s \wedge l_{sa}^{ik} - j_{sa}^{ik} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \wedge l_s + s - n - 1 \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\{j_s, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3)) \Rightarrow$$

$$fz S_{j_s, j_{ik}, j_{sa}, j_i}^{lss} = \sum_{k=1} \sum_{(j_s = j_{ik} + l_s - l_{ik})}^{( )}$$

$$\sum_{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}} \sum_{\binom{()}{j^{sa}=j_i+j_{sa}-s}} \sum_{l_{ik}+s-j_{sa}^{ik}} \sum_{n_i=n+l_k}^n \sum_{\binom{()}{n_{is}=n+l_k-j_s+1}} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}^{(n_i-j_s+1)} \sum_{\binom{()}{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k2})}} \sum_{n_s=n_{sa}+j_{sa}-j_i-l_{k3}} \frac{(n_i+j_{ik}+j_{sa}^s-j_s-j_{sa}^{ik}-j_{sa}^{ik})!}{(n_i-n-l)! \cdot (n+j_{ik}+j_{sa}^s-j_s-j_{sa}^{ik})!} \cdot \frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!} \cdot \frac{(D-l_i)!}{(D+j_{ik}+n-l_i)! \cdot (n-j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

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$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + j_{sa} - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa}^{ik} = l_{ik} \wedge l_{sa} + j_{sa} - s > l_{sa} \wedge$$

$$D + n - n < l_i \leq D + l_s + s - n - n \wedge$$

$$(D \geq n < n) \wedge I = l_k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, l_{k1}, j_{sa}^{ik}, l_{k2}, j_{sa}, \dots, l_{k3}, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + l_k \wedge$$

$$l_{kz}: z = 3 \wedge l_k = l_{k2} + l_{k3}) \vee$$

$$(D \geq n < n \wedge I = l_k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, l_{k1}, j_{sa}^{ik}, j_{sa}, \dots, l_{k3}, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + l_k \wedge$$

$$l_{kz}: z = 2 \wedge l_k = l_{k2} + l_{k3}) \vee$$

$$(D \geq n < n \wedge I = l_k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, l_{k1}, j_{sa}^{ik}, j_{sa}, \dots, l_{k3}, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

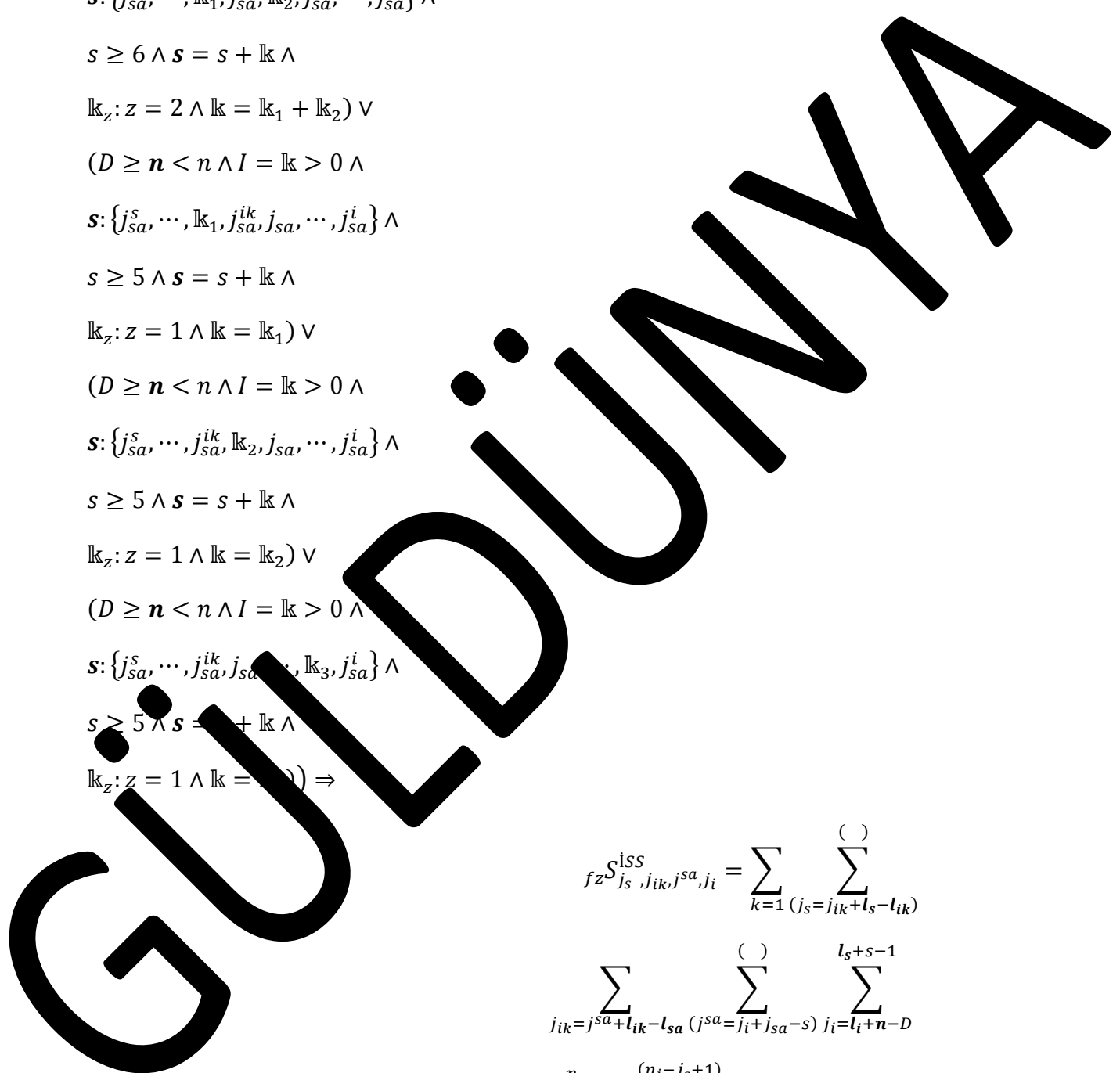
$$k_z: z = 1 \wedge k = \dots) \Rightarrow$$

$$f_z S_{j_s}^{iss} j_{ik}, j_{sa}, j_i = \sum_{k=1}^{()} \sum_{(j_s=j_{ik}+l_s-l_{ik})}$$

$$\sum_{j_{ik}=j_{sa}+l_{ik}-l_{sa}}^{()} \sum_{(j_{sa}=j_i+j_{sa}-s)}^{()} \sum_{j_i=l_i+n-D}^{l_s+s-1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j_{sa}-j_i-k_3}$$



$$\frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - l_i)!}$$

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$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

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$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

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$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$



$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

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$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$S_{j_s, j_i}^{iss} = \sum_{k=1}^{\binom{()}{j_s}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\binom{()}{j_i}}$$

$$\sum_{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}^{\binom{()}{j_i}} \sum_{(j_{sa}=j_i+l_i-l_{sa})}^{\binom{()}{j_s}} \sum_{j_i=l_i+n-D}^{l_s+s-1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{\binom{()}{j_i}} \sum_{n_s=n_{sa}+j_{sa}^{ik}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

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$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

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$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

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$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz_{j_s}^{iSS} j_{ik} j_{sa}^i = \sum_{k=1}^{\lfloor \frac{l_s}{2} \rfloor} \binom{l_s - k}{k} \binom{l_s + s - 1}{n - D - k} \sum_{n_i = n + \mathbb{k}}^n \sum_{n_{is} = n - j_s + 1}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}^{(n_i - j_s + 1)} \sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)}^{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)} \sum_{n_s = n_{sa} + j_{sa} - j_i - \mathbb{k}_3}^{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)} \frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{sa} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{sa} + j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

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$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i}^{l_{ss}} = \sum_{k=1}^{( )} \sum_{(j_s = j_{ik} + l_s - l_{ik})}^{( )} \sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}}^{( )} \sum_{(j^{sa} = j_i + j_{sa} - s)}^{( )} \sum_{j_i = l_i + n - 1}^{l_s + s - 1} \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \frac{(n_{sa} = n_i - j_{sa} + \mathbb{k}_2) n_s = n_i + j^{sa} - j_i - \mathbb{k}_3}{(n_i - n - 1)! (n + j_{ik} + j_{sa}^{is} - j_s - s - j_{sa}^{ik})!} \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - \dots + 1 \wedge$

$1 \leq j_{ik} \leq j_{ik} - j_{sa}^{ik} + \dots \wedge j_s + j_{sa}^{ik} - 1 \dots \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \dots \leq j_i + j_{sa} - s \dots + s - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} \dots + 1 > l_s \wedge \dots + j_{sa}^{ik} \dots = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$

$\dots + s - \dots < l_i \leq D + \dots + s - n - 1 \wedge$

$((D > n < n \wedge \dots) \geq 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$\dots \geq 7 \wedge \dots = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

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$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

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$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_1, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{iss} = \sum_{k=1}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+l_{ik}-l_{sa}}^{()} \sum_{(j_{sa}=j_i+j_{sa}-s)}^{()} \sum_{j_i=l_i+n-D}^{l_s+s-1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{i_s}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{i_s}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_2}$$

$$\frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!}$$

$$\frac{(l_s - 1)!}{(l_s - 1)! \cdot (l_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - l_i - l_i)! \cdot (n - j_i)}$$

$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} - j_{sa}^{ik} - j_{sa}$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j_i + s - j_{sa} \leq j_i - n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_i > l_{ik} \wedge l_{sa} + j_{sa} - s = l_s \wedge$

$D + s - n < l_i \leq D + l_s - n - 1 \wedge$

$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\}$

$s \geq 7 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \vee$

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$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

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$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

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$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

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$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \dots) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{ISS} = \sum_{k=1} \sum_{(j_s = j_{ik} - j_{sa} + 1)}^{( )}$$

$$\sum_{j_{ik} = j_{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j_{sa} = j_i + l_{sa} - l_i)}^{( )} \sum_{j_i = l_i + n - D}^{l_s + s - 1}$$

$$\sum_{n_{i_s} = n + \mathbb{k}}^n \sum_{(n_{i_s} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{i_k} = n_{i_s} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{i_k} + j_{i_k} - j_{sa} - \mathbb{k}_2)}^{( )} \sum_{n_s = n_{sa} + j_{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i + j_{i_k} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - n - I)! \cdot (n + j_{i_k} + j_{sa}^s - j_s - s - j_{sa}^{ik})!}$$



$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

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$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

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$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

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$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz^D j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i \sum_{n=0}^{\infty} \sum_{j_s=j_{ik}+l_s-l_{ik}}^{\infty} \sum_{j_{ik}=n+l_{ik}-l_{sa}}^{\infty} \sum_{j_i=n+j_{sa}-D-s}^{\infty} \sum_{j_i=j_{sa}+s-j_{sa}}^{\infty} \sum_{l_i=n+\mathbb{k}}^{\infty} \sum_{(n_i=n+\mathbb{k}-j_s+1)}^{\infty} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{\infty} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{\infty} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}^{\infty} \frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

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$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

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$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D < n < n \wedge I = \mathbb{k} > 0 \wedge$$

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$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{ISS} = \sum_{k=1}^{\binom{D}{j_s + \dots + l_s - l_{ik}}} \sum_{\substack{j_{ik} = j_{sa} + l_{ik} - l_{sa} \\ (j_{sa} = l_i + n + \dots, D-s) \\ j_i = j_{sa} + s}}^{\binom{l_{ik} + j_{sa} - i_{ik}}{j_s + 1}} \sum_{n_i = \mathbb{k} (n_{is} = n_{is} + j_s + 1)}^n n_{ik}^{j_{ik} - \mathbb{k}_1} \sum_{(n_{sa} = n_{ik} + j_{ik} + \dots - \mathbb{k}_2)}^{\binom{D}{n_s = n_{sa} + j_{sa} - j_i - \mathbb{k}_3}} \frac{(n_i + j_{sa} + j_s - j_s - s - j_{sa}^{ik} - I)!}{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{sa} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_i + j_{sa} - s \wedge j_{sa}^s + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + j_{sa} = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$j_s + s - 1 < l_i \leq D + l_s + s - n - 1 \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

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$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

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$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

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$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{ISS} = \sum_{k=1}^{()} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()} \sum_{(l_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{(j_{sa}=l_i+n+j_{sa}-D-s)} \sum_{(j_i=j_{sa}+l_i-l_{ik})} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n_{is}-j_{ik}-k_1)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-k_2)}^{()} \sum_{(n_{sa}=n_{sa}+j_{sa}-j_i)} \frac{(n_i+j_{ik}-j_{sa}-s-j_{ik}-l)!}{(n_i-n-l)! \cdot (n_{ik}+j_{sa}-j_{sa}^{ik}-j_{sa}^{ik})!} \cdot \frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!} \cdot \frac{(D-l_i)!}{(D-j_i-n-l_i)! \cdot (n-j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq n - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq n + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa}^{ik} \wedge j_i + j_{sa} - s \wedge j_{sa}^{ik} - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 \leq l_{sa} + j_{sa}^{ik} - j_{sa} \wedge l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + j_{sa} - n < l_i \leq D - l_s + s - l_{ik} - 1 \wedge$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_s \leq n - n + 1) \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_1, j_{sa}^{ik}, \dots, j_{sa}^i, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$z = k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge l_s > 1 \wedge l_s \leq n - n + 1) \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}^{ik}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 5 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\}$

$s \geq 5 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

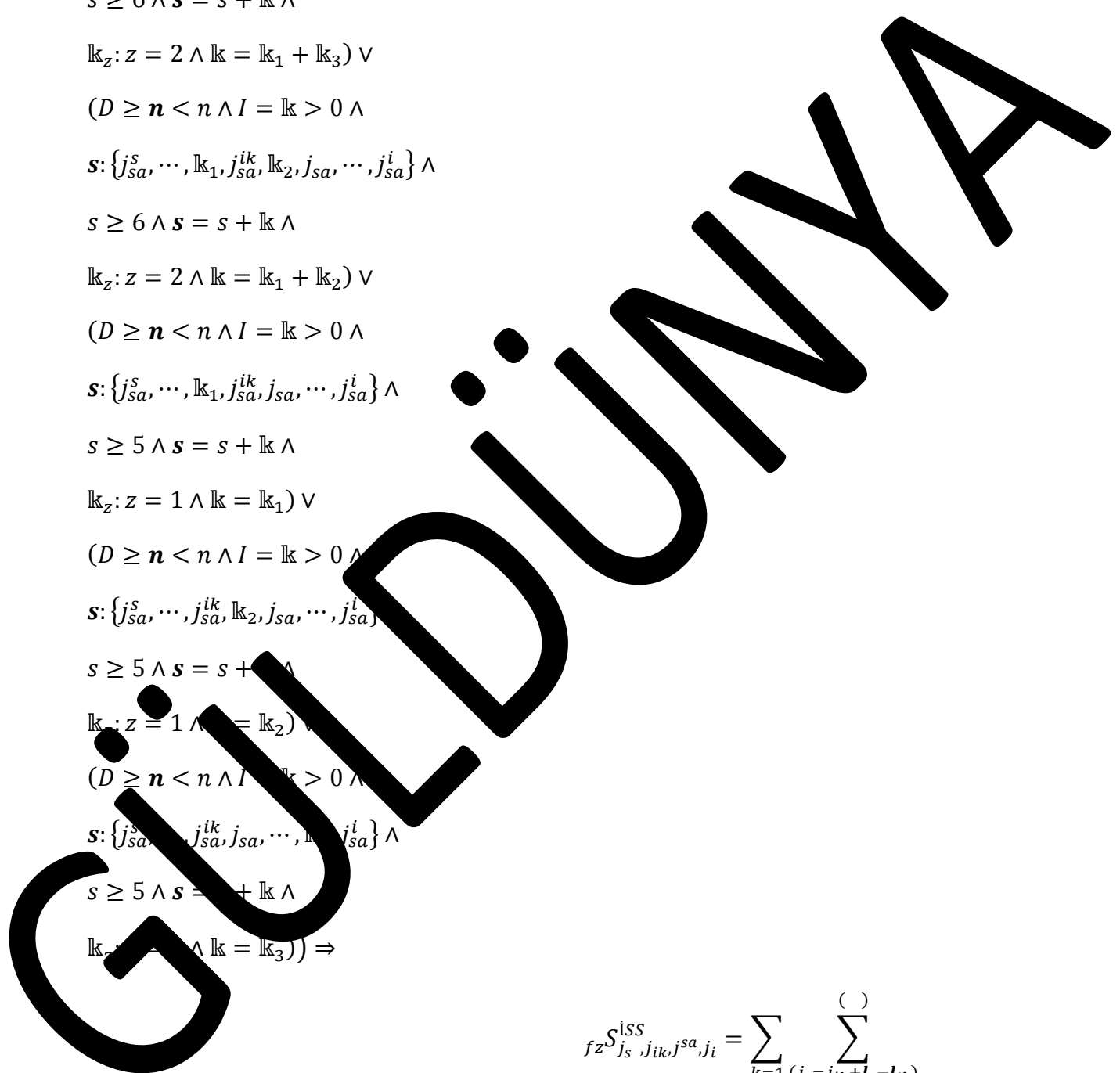
$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 5 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$

$$fz S_{j_s, j_{ik}, j_{sa}, j_i}^{ISS} = \sum_{k=1} \sum_{(j_s = j_{ik} + l_s - l_{ik})}^{( )}$$

$$\sum_{j_{ik} = j_{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(l_{ik} + j_{sa} - j_{sa}^{ik})} \sum_{j_i = j_{sa} + s - j_{sa}}$$



$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{i_s}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{i_s}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_2} \frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!} \cdot \frac{(l_s - 2)!}{(l_s - 1)! \cdot (l_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - l_i - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} - j_{sa}^{ik} - j_{sa}$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j_i + s - j_{sa} \leq j_{ik} < n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_i = l_{ik} \wedge l_{sa} + j_{sa} - s > 0 \wedge$$

$$D + s - n < l_i \leq D + l_s - n - 1 \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\}$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3 \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$



$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \dots) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{ISS} = \sum_{k=1} \sum_{(j_s = j_{ik} + l_s - l_{ik})}^{( )}$$

$$\sum_{j_{ik} = j_{sa} + l_{ik} - l_{sa}} \sum_{(l_s + j_{sa} - 1)}^{(l_s + j_{sa} - 1)} \sum_{j_i = j_{sa} + s - j_{sa}}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_i = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)}^{( )} \sum_{n_s = n_{sa} + j_{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz \sum_{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i} \sum_{(j_s = j_{ik} + l_s - l_{ik})} \sum_{(l_s = a - 1)} \sum_{j_{ik} = j_{sa}^{ik} - j_{sa}} \sum_{(i + n + j_{sa} - D - s)} \sum_{j_i = j_{sa} + l_i - l_{sa}} \sum_{n_i = n + \mathbb{k}} \sum_{(n_i = n + \mathbb{k} - j_s + 1)} \sum_{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)} \sum_{(n_s = n_{sa} + j_{sa} - j_i - \mathbb{k}_3)}$$

$$\frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 5 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{ISS} = \sum_{k=1} \sum_{(j_s = \dots - j_{sa}^{ik} + 1)}^{(\dots)}$$

$$\sum_{j_{ik} = j_{sa} + l_{ik} - l_{sa}}^{(l_s + j_{sa} - 1)} \sum_{(j_{sa} = l_i + n + \dots)}^{(D - s)} \sum_{j_i = j_{sa} + l_i}^{(j_s + 1)}$$

$$n_i \sum_{\mathbb{k} (n_{is} = n_{is} + j_s + 1)}^{(j_s + 1)} n_{ik} \sum_{j_{ik} = \mathbb{k}_1}^{(j_s + 1)}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - a - \mathbb{k}_2)}^{(\dots)} \sum_{n_s = n_{sa} + j_{sa} - j_i - \mathbb{k}_3}^{(\dots)}$$

$$\frac{(n_i \dots + j_s^s \dots j_s - s - j_{sa}^{ik} - I)!}{(n_i \dots - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq \dots < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_s - j_{sa}^{ik} + 1 \wedge l_s + j_{sa} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + \dots - j_{sa}^{ik} \dots \leq j_i + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + \dots = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$

$l_i + s - \dots < l_i \leq D + l_s + s - n - 1 \wedge$

$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 7 \wedge s = s + \mathbb{k} \wedge$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\}$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i}^{ISS} = \sum_{k=1}^{( )} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(l_s+j_{sa}-1)} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)}^{(l_s+j_{sa}-1)} \sum_{j_i=j^{sa}+s-j_{ik}}^{(l_s+j_{sa}-1)}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-k_1}^{(n_i-j_s+1)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-1)}^{( )} \sum_{(n_s=n_{sa}+j^{sa}-j_i)}^{( )}$$

$$\frac{(n_i + j_{ik} - j^{sa} - j_i - s - j_{ik} - I)!}{(n_i - I)! \cdot (n_{ik} + j_{sa} - j_i - s - j_{sa} - j_{ik})!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > 1 \wedge l_s = D - n + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa}^{ik} - j_{sa} \leq j^{sa} < j_i + j_{sa} - s \wedge j^{sa} - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > 0 \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$

$D + j_{sa} - n < l_i \leq D - l_s + s - j_{sa} - 1 \wedge$

$(D \geq n < n \wedge I = k > 0) \wedge$

$s: \{j_s^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 7 \wedge s = s + k \wedge$

$z = 2 \wedge k = k_1 + k_2 + k_3) \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k \wedge$

$k_z: z = 2 \wedge k = k_2 + k_3) \vee$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \vee$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{ISS} = \sum_{k=1}^{(\cdot)} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\cdot)}$$

$$\sum_{j_{ik} = j_{sa}^{ik} + l_{ik} - l_{sa}}^{(l_s + j_{sa} - 1)} \sum_{(j_{sa} = l_i + n + j_{sa} - D - s)}^{(l_s + j_{sa} - 1)} \sum_{j_i = j_{sa}^{ik} + s - j_{sa}}^{(l_s + j_{sa} - 1)}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}^{(n_i - j_s + 1)}$$



$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3} (n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)! / ((n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!)$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_{ik} < n$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > j_{ik} \wedge l_i + j_s - s = l_s \wedge$

$D + s - n < l_i \leq D + l_s + s - n - 1$

$((D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 7 \wedge s = s + k \wedge$

$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 6, s = s + k \wedge$

$k_z: z = 2 \wedge k = k_2 + k_3) \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 5, s = s + k \wedge$

$k_z: z = 2 \wedge k = k_1 + k_3) \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

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$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{ISS} = \sum_{k=1}^{(\cdot)} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik} = j_{sa} + j_{sa}^{ik} - j_{sa}}^{(l_s + j_{sa} - 1)} \sum_{(j_{sa} = l_i + n + j_{sa} - D - s)} \sum_{j_i = j_{sa} + l_i - l_{sa}}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)}^{(\cdot)} \sum_{n_s = n_{sa} + j_{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$\begin{aligned} & \sum_{j_{ik} = n + j_{sa}^{ik} - D - s}^{l_{sa} + j_{sa}^{ik} - j_{sa}} \sum_{j_i = j_{sa} + s - j_{sa}}^{(n_i - 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}^{(n_i - 1)} \\ & \sum_{n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2}^{(n_i - 1)} \sum_{n_s = n_{sa} + j_{sa} - j_i - \mathbb{k}_3}^{(n_i - 1)} \\ & \frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!} \\ & \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \\ & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \end{aligned}$$

$$\geq n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$fz S_{j_s, j_{ik}, j_{sa}, j_i}^{iSS} = \sum_{k=1} \sum_{(j_s=j_{ik}+l_s-l_i)}^{( )} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{( )} \sum_{(j_i=j_s-j_{sa})}^{( )} \sum_{(n_i=n+\mathbb{k})}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n_i+1)}^{(n_i-j_s+1)} \sum_{(n_{sa}=n_{ik}-j_{sa}-\mathbb{k}_1)}^{(n_{sa}=n_{sa}+j_{sa}-j_i-\mathbb{k}_3)} \frac{(n_i+j_{ik}+j_{sa}^s)(j_s-s-j_{sa}^{ik}-I)!}{(n_i-n+I)! \cdot (n+j_{sa}^s+j_{sa}-j_s-s-j_{sa}^{ik})!} \cdot \frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!} \cdot \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!}$$

$$D \geq n < n \wedge l_s = 1 \wedge l_s = D - n + 1 \wedge$$

$$1 \leq j_{ik} - j_{sa}^{ik} + j_{sa} \wedge j_s + j_{sa} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq j_{sa} + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = j_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n - l_i \leq D + l_s + s - n - 1 \wedge$$

$$(D > n - n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i}^{iss} = \sum_{k=1} \sum_{(j_s = j_{ik} + l_s - l_{ik})}^{( )}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_{ik}} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{( )} \sum_{j_i=j_{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-k_2)}^{( )} \sum_{n_s=n_{sa}+j_{sa}-j_i-k_3}$$

$$\frac{(n_i + j_{ik} + j_{sa}^s - j_s - j_{sa}^{ik} - 1)!}{(n_i - n - 1)! \cdot (n + j_{ik} + j_{sa}^s - j_s - j_{sa}^{ik})!}$$

$$\frac{(l_s - 2)!}{(l_s - 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - 1)!}{(D + j_{sa} - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} \leq j_{ik} \leq j_{sa}^{ik} + j_{sa} - j_s \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq j_{ik} + j_{sa} - s \wedge j_{sa}^{ik} - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_{sa} + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq l_i + l_s + s - n - 1 \wedge$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

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$$(D \geq n < n \wedge I = k > 0 \wedge$$

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$$s \geq 6 \wedge s = s + k \wedge$$

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$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$



$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

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$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \dots) \Rightarrow$$

$$fz S_{j_s}^{iss} j_{ik}, j_{sa}, j_i = \sum_{k=1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_{ik}} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{( )} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{( )} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_{ik} < n$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - j_{ik} \wedge l_i + j_{sa} - s > l_s \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = (\mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6, s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = (\mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5, s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{iss} = \sum_{k=1}^{(\ )} \sum_{(j_s = j_{ik} + l_s - l_{ik})}$$

$$\sum_{j_{ik} = l_i + n + j_{sa}^{ik} - D - s}^{l_s + j_{sa}^{ik} - 1} \sum_{(j_{sa} = j_{ik} + l_{sa} - l_{ik})}^{(\ )} \sum_{j_i = j_{sa} + s - j_{sa}}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)}^{(\ )} \sum_{n_s = n_{sa} + j_{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz \dots = \sum_{i=0}^{l_s+l_{sa}-l_{ik}} \dots$$

$$\sum_{j_{ik}=\dots}^{l_s+j_{sa}^{ik}-1} \sum_{j_{sa}=\dots}^{j_{sa}^{ik}+j_{sa}-j_{sa}^{ik}} \sum_{j_i=j_{sa}^{sa}+l_i-l_{sa}} \dots$$

$$\sum_{n+\mathbb{k}}^{(n_i-1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \dots$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{( )} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3} \dots$$

$$\frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i}^{iss} = \sum_{k=1}^{(\cdot)} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + \dots)}$$

$$\sum_{j_{ik} = l_i + n + j_{sa}^{ik} - D - s}^{l_s + j_{sa}^{ik} - 1} \sum_{(j^{sa} = j_{ik} + l_{sa} - j_{sa}^{ik} - l_{sa})}^{(\cdot)}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_i - j_s + 1)}^{(n_i - j_s + 1)} \sum_{(n_{ik} = \dots + j_s - j_{ik} - \mathbb{k}_1)}$$

$$\sum_{(n_{sa} = n_{ik} - j^{sa} - \mathbb{k}_2)}^{(\cdot)} \sum_{(n_{sa} + j^{sa} - j_i - \mathbb{k}_3)}$$

$$\frac{(j_s + j_{ik} + j_{sa}^{ik} - j_s - s - j_{sa}^{ik} - l)!}{(n - \dots)! \cdot (n + \dots + j_{sa}^{ik} - j_s - s - j_{sa}^{ik})!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s = 1 \wedge l_s = D - n \wedge$$

$$1 \leq j_{sa} \leq j_{ik} - j_{sa}^{ik} + \dots, j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \dots + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - \dots + 1 = l_s + l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n - l_i \leq D + l_s + s - n - 1 \wedge$$

$$\dots \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i}^{iss} = \sum_{k=1} (j_s = j_{ik} + l_s - l_{ik}) \sum_{( )}$$



$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-1} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-k_2)}^{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-k_2)} \sum_{n_s=n_{sa}+j_{sa}-j_i-k_3}$$

$$\frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - 1)!}{(n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)}{(D + j_{ik} + n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$   
 $1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} \leq j_{ik} \leq j_{sa}^{ik} + j_{sa} - j_{sa}^{ik} \wedge$   
 $j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - s \wedge j_{sa} + j_{sa} - j_{sa} \leq j_i \leq n \wedge$   
 $l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_{sa} + j_{sa} - s > l_{sa} \wedge$   
 $D + n < l_i \leq l_s + s - n - 1 \wedge$   
 $(n \geq n < n) \wedge I = k > 0 \wedge$   
 $s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, \dots, k_3, j_{sa}^i\} \wedge$   
 $s \geq 7 \wedge s = s + k \wedge$   
 $k_z: z = 3 \wedge k = k_2 + k_3) \vee$   
 $(D \geq n < n \wedge I = k > 0 \wedge$   
 $s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$   
 $s \geq 6 \wedge s = s + k \wedge$   
 $k_z: z = 2 \wedge k = k_2 + k_3) \vee$   
 $(D \geq n < n \wedge I = k > 0 \wedge$   
 $s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = \dots) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{ISS} = \sum_{k=1}^{(\ )} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )}$$

$$\sum_{j_{ik} = l_i + n + j_{sa}^{ik} - D - s}^{l_s + j_{sa}^{ik} - 1} \sum_{(j_{sa} = j_{ik} + l_{sa} - l_{ik})}^{(\ )} \sum_{j_i = j_{sa} + s - j_{sa}}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{( )} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3} (n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)! / ((n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!)$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_{ik} < n$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > j_{ik} \wedge l_i + j_s - s = l_s \wedge$

$D + s - n < l_i \leq D + l_s + s - n - 1$

$((D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 7 \wedge s = s + k \wedge$

$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 6, s = s + k \wedge$

$k_z: z = 2 \wedge k = k_2 + k_3) \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 5, s = s + k \wedge$

$k_z: z = 2 \wedge k = k_1 + k_3) \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{ISS} = \sum_{k=1} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{( )}$$

$$\sum_{j_{ik} = l_i + \mathbf{n} + j_{sa}^{ik} - D - s}^{l_s + j_{sa}^{ik} - 1} \sum_{(j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}^{( )} \sum_{j_i = j_{sa}^{ik} + l_i - l_{sa}}$$

$$\sum_{n_i = \mathbf{n} + \mathbb{k}}^n \sum_{(n_{is} = \mathbf{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)}^{( )} \sum_{n_s = n_{sa} + j_{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - \mathbf{n} - I)! \cdot (\mathbf{n} + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z S_{j_s}^{i_s} \sum_{i_k=j_s+l_{ik}-l_s}^{(l_{sa}-j_{sa}+1)} \sum_{j_i=j_{sa}+s-j_{sa}}^{(D-s+1)} \sum_{i=n+\mathbb{k}}^{(n_i-j_{sa}-1)} \sum_{(n_{is}=n+\mathbb{k}-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3} \frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \Rightarrow$$

$$f_z^{S_{j_s, j_{ik}, j^{sa}, j_i}} = \sum_{k=1}^{(l_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s}^{( )} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{( )} \sum_{j_i=l_i+s-j_{sa}}^{( )}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{( )}$$

$$\frac{(n_i + j_{ik} + j_{sa}^{ik} - j_s - j_{sa}^{ik} - 1)!}{(n_i - 1)! \cdot (n_{ik} + j_{sa}^{ik} - j_s - s - j_{sa}^{ik})!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s \leq j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} - j_{sa}^{ik} - j_{sa}^{ik} \leq j^{sa} + j_i + j_{sa}^{ik} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} = l_s \wedge l_{sa} \wedge j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \wedge l_s + s - n - 1 \wedge$$

$$((D \geq n < n \wedge l = k > 0 \wedge$$

$$\{j_s, j_{ik}, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge l = k > 0 \wedge$$



$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3)) \Rightarrow$$

$$fz S_{j_s, j_{ik}, j_{sa}, j_i}^{iss} = \sum_{k=1} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s} \sum_{\binom{()}{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+l_k}^n \sum_{\binom{()}{n_{is}=n+l_k-j_s+1}}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{\binom{()}{n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2}}} \sum_{n_s=n_{sa}+j_i-j_{i_3}}$$

$$\frac{(n_i + j_{ik} + j_{sa}^s - j_s - j_{sa}^{ik} - j_i)!}{(n_i - n - l)! \cdot (n + j_{ik} + j_{sa}^s - j_s - j_{sa}^{ik})!} \cdot \frac{(l_s - 2)!}{(l_s - j_i)! \cdot (j_s - 2)!} \cdot \frac{(D - n - l)!}{(D + j_{sa} - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} \leq j_{ik} \leq j_{sa}^{ik} + j_{sa} - j_s \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_{sa}^{ik} + j_{sa} - s \wedge j^{sa} - j_{sa} \leq j_s \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_{sa} + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - l_i \wedge$$

$$(D \geq n < n \wedge l = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge l = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge l = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \dots) \Rightarrow$$

$$fz S_{j_s, j_{ik}, j_{sa}, j_i}^{iSS} = \sum_{k=1}^{(l_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=l_i+n-D-s+1)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\cdot)} \sum_{j_i=j_{sa}^s+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{( )} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3} (n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)! / ((n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!)$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_s)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_{ik} < n$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - j_{ik} \wedge l_i + j_{sa} - s > l_s \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = (k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6, s = s + k \wedge$$

$$k_z: z = 2 \wedge k = (k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5, s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{ISS} = \sum_{k=1}^{(l_s)} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s}^{(n)} \sum_{(j_{sa}=j_{ik}+l_{sa}-l_{ik})}^{(n_i-j_s+1)} \sum_{j_i=j_{sa}+s-j_{sa}}^{(n_i-j_s+1)}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k1}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-l_{k2})}^{(n)} \sum_{n_s=n_{sa}+j_{sa}-j_i-l_{k3}}$$

$$\frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$\begin{aligned}
 & f_z S_{j_s}^{i_s} \sum_{k=0}^{(l_s)} \sum_{i=0}^{D-s+1} \\
 & \sum_{k=j_s+l_{ik}-l_s}^{(j_s+l_{ik}-l_s)} \sum_{k=j_{sa}-j_{sa}^{ik}}^{(j_s+l_{ik}-l_s)} \sum_{j_i=j_{sa}+l_i-l_{sa}}^{(j_s+l_{ik}-l_s)} \\
 & \sum_{i=n+\mathbb{k}}^{(n_i-1)} \sum_{i=n+\mathbb{k}}^{(n_i-1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(n_i-1)} \\
 & \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(n_i-1)} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}^{(n_i-1)} \\
 & \frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!} \\
 & \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

$$s \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$



$s \geq 5 \wedge s = s + k \wedge$

$k_z: z = 1 \wedge k = k_3) \Rightarrow$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i}^{iss} = \sum_{k=1} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})} \sum_{j_i=l_i+l_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\frac{(n_i + j_{ik} + j_{sa}^{ik} - j_s - j_{sa}^{ik} - I)!}{(n_i - I)! \cdot (n_{ik} + j_{sa}^{ik} - j_s - s - j_{sa}^{ik})!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa}^{ik} - j_{sa}^{ik} \leq j^{sa} + j_i + j_{sa}^{ik} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$

$j_{ik} - j_{sa}^{ik} - 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$

$D + s - n < l_i \wedge l_s + s - n - 1 \wedge$

$((D \geq n < n \wedge I = k > 0 \wedge$

$\{j_{sa}^{is}, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 7 \wedge s = s + k \wedge$

$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3)) \Rightarrow$$

$$f_z^{S_{j_s, j_{ik}, j_{sa}, j_i}^{iSS}} = \sum_{k=1} \sum_{(j_s=l_i+n-D-s+1)}^{(I_s)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s} \sum_{\binom{()}{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+l_k}^n \sum_{\binom{()}{n_{is}=n+l_k-j_s+1}}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{\binom{()}{n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2}}} \sum_{n_s=n_{sa}+j_i-j_{l_{k_3}}}$$

$$\frac{(n_i + j_{ik} + j_{sa}^s - j_s - j_{sa}^{ik} - 1)!}{(n_i - n - 1)! \cdot (n + j_{ik} + j_{sa}^s - j_s - j_{sa}^{ik})!}$$

$$\frac{(l_s - 2)!}{(l_s - 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - 1)!}{(D + j_s - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{ik}^{ik} \leq j_{ik} \leq j_s + j_{sa} - j_{sa}^{ik} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_{ik} + j_{sa} - s \wedge j^{sa} - j_{sa} \leq j_l \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_{sa} + j_{sa} - s > l_{sa} \wedge$

$D + s - n < l_i \leq D + l_s + s - n - 1$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 7 \wedge s = s + k \wedge$

$k_z: z = 3 \wedge k = k_2 + k_3) \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k \wedge$

$k_z: z = 2 \wedge k = k_2 + k_3) \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = \dots) \Rightarrow$$

$$fz S_{j_s, j_{ik}, j_{sa}, j_i}^{iss} = \sum_{k=1} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j_{sa}=j_{ik}+l_{sa}-l_{ik})}^{( )} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-k_2)}^{( )} \sum_{n_s=n_{sa}+j_{sa}-j_i-k_3}$$

$$\frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - l_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$\begin{aligned} & \sum_{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}}^{l_s} = \sum_{k=1} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s)} \\ & \sum_{j_s+j_{sa}^{ik}-1}^{(j_s)} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(j_s)} \sum_{j_i=j_{sa}^s+l_i-l_{sa}} \\ & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\ & \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(j_s)} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3} \\ & \frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!} \cdot \\ & \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\ & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \end{aligned}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz S_{j_s, j_{ik}, j_{sa}, j_i}^{iSS} = \sum_{k=1}^{\lfloor j_s \rfloor} \binom{j_s}{k} \binom{j_{ik}}{k} \binom{j_{sa}}{k} \binom{j_i}{k}$$

$$\sum_{j_{ik}=j_{sa}+j_s}^{\lfloor j_{sa}+j_s \rfloor} \binom{j_{sa}+j_s}{j_{ik}} \binom{j_{sa}}{j_{sa}-j_{ik}} \binom{j_i}{j_i-j_{ik}} \binom{l_{ik}+s-j_{sa}^{ik}}{D-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \binom{n_i-j_s+1}{n_i-n+\mathbb{k}} \binom{n_i-j_s+1}{j_s+1} \binom{n_i}{n_i-n+\mathbb{k}} \binom{n_i}{n_i-n+\mathbb{k}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik_2})} \binom{n_{sa}}{n_{sa}-j_i-\mathbb{k}_3} \binom{n_{sa}}{n_{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{sa} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$



$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

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$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

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$$(D \geq n < n \wedge I = k > 0 \wedge$$

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$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$f_z^{S^{lss}}_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{( )} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{( )} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{( )} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_s+s-1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{(n_{sa}=n+\mathbb{k}-j_s+1)}^{(n_{sa}=n+\mathbb{k}-j_s+1)} \sum_{(n_s=n+\mathbb{k}-j_s+1)}^{(n_s=n+\mathbb{k}-j_s+1)} \sum_{(n_s=n+\mathbb{k}-j_s+1)}^{(n_s=n+\mathbb{k}-j_s+1)}$$

$$\frac{(n_i - j_{ik} + j_{sa}^{ik} - j_s - s - j_{sa}^{ik})!}{(n_i - n - l)! \cdot (n + j_{ik} - j_{sa}^{ik} - j_s - s - j_{sa}^{ik})!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_{ik} - j_{sa}^{ik} + j_{sa}^{ik} \wedge j_s + j_{sa}^{ik} - 1 \leq j_i \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} - j_{sa} \leq j_i \leq j_{sa} - s - j_{sa}^{ik} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$j_{sa} - j_{sa}^{ik} < l_{sa} \leq D - l_s + j_{sa} - n - 1 \wedge$$

$$((D > n < n \wedge l_s > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

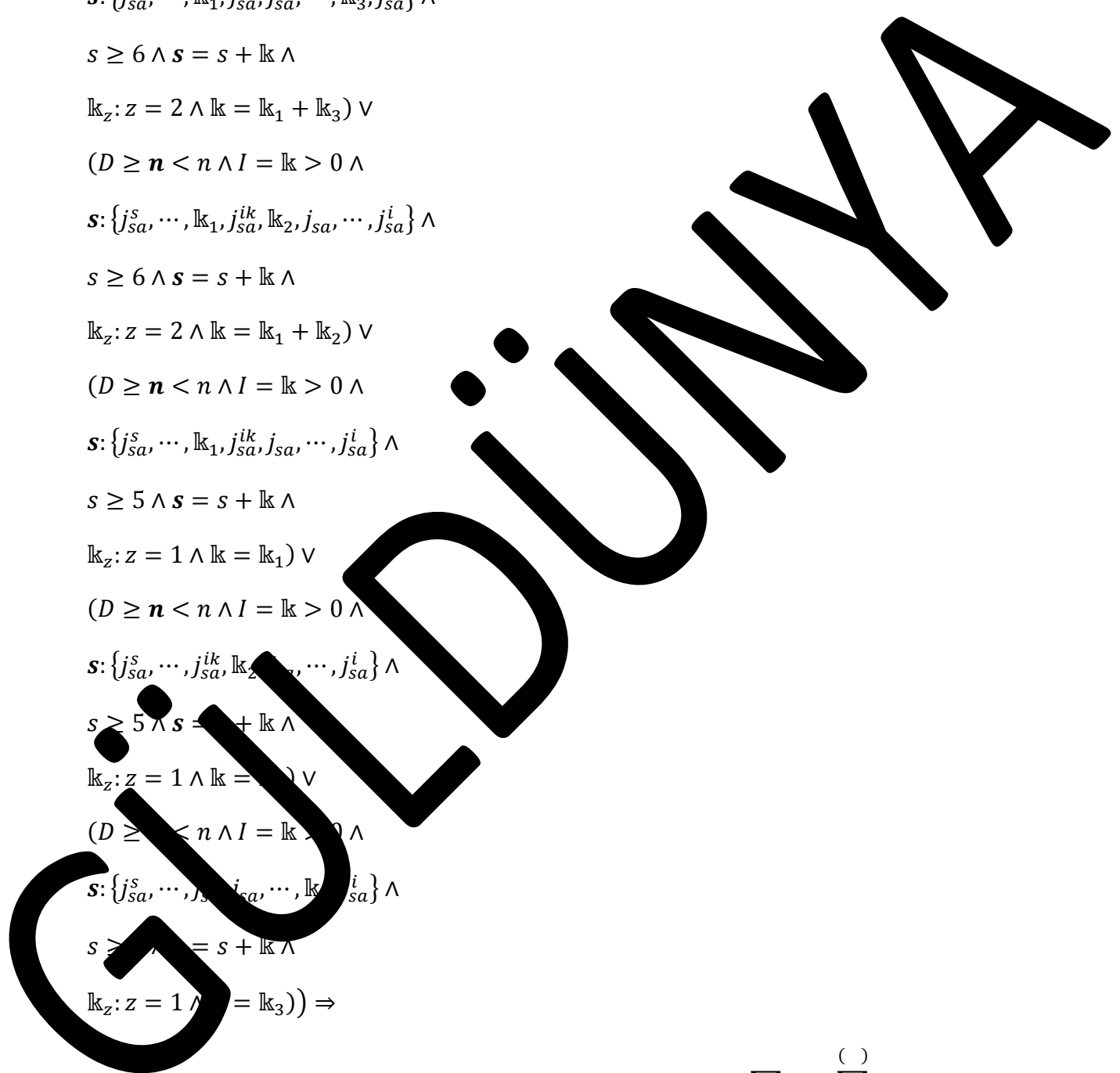
$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_1, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{iss} = \sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{( )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+l_{ik}-l_{sa}} \sum_{(j_{sa}=j_i+l_{sa}-l_i)}^{( )} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_s+s-1}$$



$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{i_s}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{i_s}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_2} \frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!} \cdot \frac{(l_s - 1)!}{(l_s - 1)! \cdot (l_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - l_i - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} - j_{sa}^{ik} - j_{sa}$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j_i + s - j_{sa} \leq j_{ik} < n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_i > l_{ik} \wedge l_{sa} + j_{sa} - s = l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + j_{sa} - n = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\}$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3 \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \dots) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{ISS} = \sum_{k=1} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{( )}$$

$$\sum_{j_{ik} = j_{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j_{sa} = j_i + l_{sa} - l_i)}^{( )} \sum_{j_i = l_{sa} + n + s - D - j_{sa}}^{l_s + s - 1}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)}^{( )} \sum_{n_s = n_{sa} + j_{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

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$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

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$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz^{\sum_{j_s=j_{sa}^s, \dots, j_{sa}^{ik}} \sum_{(j_s=j_{ik}+l_s-l_{ik})} \sum_{(n_i-j_s+1)} \sum_{(n_i=n+l_k)} \sum_{(n_{i_s}=n+l_k-j_s+1)} \sum_{(n_{i_k}=n_{i_s}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{(n_{sa}=n_{i_k}+j_{ik}-j_{sa}-\mathbb{k}_2)} \sum_{(n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3)} \frac{(n_i+j_{ik}+j_{sa}^s-j_s-s-j_{sa}^{ik}-I)!}{(n_i-n-I)! \cdot (n+j_{ik}+j_{sa}^s-j_s-s-j_{sa}^{ik})!} \cdot \frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!} \cdot \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$



$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{ISS} = \sum_{(j_s=j_{ik}+j_{sa}-l_{ik})} \sum_{(j_{sa}=l_{sa}+n-1)} \sum_{(j_i=j_{sa}+l_i-l_{sa})} \sum_{(n_i=n+\mathbb{k})} \sum_{(n_{ik}=n+\mathbb{k}-j_s)} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{(n_{ik}+j_{ik}+j_{sa}-\mathbb{k}_2)} \sum_{(n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3)} \frac{+j_{ik}+j_{sa}^s-j_s-s-j_{sa}^{ik}-I)!}{(n_i-n_{ik}-I)! \cdot (n+j_{ik}+j_{sa}^s-j_s-s-j_{sa}^{ik})!} \cdot \frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!} \cdot \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_i \leq D - n + 1 \wedge$$

$$1 \leq j_i \leq j_{ik} - j_{sa} \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - s \wedge j_{sa}^s + s - j_{sa} \leq j_i \leq n \wedge$$

$$j_{sa} - j_{sa}^{ik} - 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \Rightarrow$$

$$fz S_{j_s, j_{ik}, j_{sa}, j_i}^{ISS} = \sum_{k=1}^{(\cdot)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)}$$

$$\sum_{j_{ik}=j_{sa}^{a}+l_{ik}-l_{sa}}^{(l_s+j_{sa}-1)} \sum_{(j_{sa}=l_{sa}+n-D)}^{(l_s+j_{sa}-1)} \sum_{j_i=j_{sa}^{a}+l_i}^{(l_s+j_{sa}-1)}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-k_1}^{(n_i-j_s+1)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{a}-l_{sa})}^{(\cdot)} \sum_{(n_s=n_{sa}+j_{sa}^{a}-j_i)}^{(\cdot)}$$

$$\frac{(n_i + j_{ik} - j_{sa}^{a} - l_{sa} - s - j_{ik} - 1)!}{(n_i - n + 1)! \cdot (n_{ik} + j_{sa}^{a} - j_i - j_{sa}^{a} - j_{sa}^{ik})!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > 1 \wedge l_s = n - n + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{a} - 1 \leq j_{ik} \leq j_{sa}^{a} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa}^{a} - j_{sa}^{ik} \leq j_{sa}^{a} \leq j_i + j_{sa} - s \wedge j_{sa}^{a} - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_{sa} \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$D + l_{sa} - n < l_{sa} \leq D + l_s + l_{sa} - n - 1 \wedge$

$(D \geq n < n \wedge I = k > 0) \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}^a, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 7 \wedge s = s + k \wedge$

$z = 2 \wedge k = k_1 + k_2 + k_3) \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}^a, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k \wedge$

$k_z: z = 2 \wedge k = k_2 + k_3) \vee$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \vee$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{ISS} = \sum_{k=1}^{(\cdot)} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik} = j_{sa} + j_{sa}^{ik} - j_{sa}}^{(l_s + j_{sa} - 1)} \sum_{(j_{sa} = l_{sa} + n - D)} \sum_{j_i = j_{sa} + l_i - l_{sa}}$$

$$\sum_{n_i = n + k}^n \sum_{(n_i = n + k - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{( )} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3} (n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)! / ((n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!)$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_s)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_{ik} < n$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > j_{ik} \wedge l_i + j_{sa} - s = l_s \wedge$

$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$

$((D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 7 \wedge s = s + k \wedge$

$k_z: z = 3 \wedge k = (k_1 + k_2 + k_3) \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 6, s = s + k \wedge$

$k_z: z = 2 \wedge k = (k_2 + k_3) \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 5, s = s + k \wedge$

$k_z: z = 2 \wedge k = k_1 + k_3) \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$$s \geq 6 \wedge \mathbf{s} = \mathbf{s} + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = \mathbf{s} + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = \mathbf{s} + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = \mathbf{s} + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{ISS} = \sum_{k=1}^{\binom{()}{j_s=j_{ik}+l_s-l_{ik}}}$$

$$\sum_{j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa}}^{l_{ik}} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{\binom{()}{j_i=j_{sa}+l_i-l_{sa}}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{\binom{()}{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}}$$

$$\frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - \mathbf{n} - I)! \cdot (\mathbf{n} + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz = \sum_{j_{ik}=l_{sa}+j_{sa}^{ik}-D-j_{sa}}^{l_s+j_{sa}^{ik}-1} \sum_{j_i=j_{sa}^s+l_i-l_{sa}}^{j_{sa}^s+l_{sa}-j_{sa}^{ik}+j_{sa}-j_{sa}^{ik}} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(n_i-1)} \sum_{n_s=n_{sa}+j_{sa}^s-j_i-\mathbb{k}_3}^{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^s-\mathbb{k}_2)}$$

$$\frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$n > 1 \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa}^s + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa}^s \leq j_i + j_{sa} - s \wedge j_{sa}^s + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$



$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i}^{iss} = \sum_{k=1}^{\binom{()}{j_s=j_{ik}-j_{sa}^{ik}+}} \sum_{j_{ik}=l_{sa}+n+j_{sa}^{lk}-D-j_{sa}}^{l_s+j_{sa}^{lk}-1} \sum_{j^{sa}=j_{ik}+l_{sa}}^{\binom{()}{j^{sa}=j_{ik}+l_{sa}}} \sum_{n_i=n+\mathbb{k}}^n \sum_{n_{ik}=\binom{(n_i-j_s+1)}{n_i=n+\mathbb{k}+1}}^{\binom{(n_i-j_s+1)}{n_{ik}=\binom{(n_i-j_s+1)}{n_i=n+\mathbb{k}+1}}} \sum_{(n_{sa}=n_{ik}-j^{sa}-\mathbb{k}_2)}^{\binom{()}{n_{sa}=n_{ik}-j^{sa}-\mathbb{k}_2}} \sum_{(n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}^{\binom{()}{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}} \frac{(j_s + j_{ik} + j_{sa} - j_s - s - j_{sa}^{ik} - I)!}{(n - \dots)! \cdot (n + \dots + j_{sa} - j_s - s - j_{sa}^{ik})!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s = 1 \wedge l_s = D - n \wedge$$

$$1 \leq j_{sa} \leq j_{ik} - j_{sa}^{ik} + j_{sa} \leq j_s + j_{sa} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_{sa} + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s + l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - l_{sa} \leq l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{iss} = \sum_{k=1} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{( )}$$

$$\sum_{j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa}}^{l_s+j_{sa}^{ik}-1} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j_{sa}+l_i-l_{sa}} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-k_2)} \sum_{n_s=n_{sa}+j_{sa}-j_i-k_3} \frac{(n_i+j_{ik}+j_{sa}^s-j_s-j_{sa}^{ik}-1)!}{(n_i-n-1)! \cdot (n+j_{ik}+j_{sa}^s-j_s-j_{sa}^{ik})!} \cdot \frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!} \cdot \frac{(D-l_i)}{(D+j_{ik}+n-l_i)! \cdot (n-j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} \leq j_{ik} \leq j_{sa}^{ik} + j_{sa} - j_{sa}^{ik} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq j_{sa}^{ik} + j_{sa} - s \wedge j_{sa}^{ik} + j_{sa} - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa}^{ik} > l_{ik} \wedge l_{sa} + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{ik} - n < l_{sa} \leq D + l_s + j_{sa} - j_{sa}^{ik} - 1 \wedge$$

$$(D \geq n < n) \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n) \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n) \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \dots) \Rightarrow$$

$$fz S_{j_s, j_{ik}, j_{sa}, j_i}^{ISS} = \sum_{k=1}^{(l_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s = l_{sa} + n - D - j_{sa} + 1)}$$

$$\sum_{j_{ik} = j_s + l_{ik} - l_s}^{()} \sum_{(j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})} \sum_{j_i = j_{sa} + l_i - l_{sa}}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{( )} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_{ik} < n$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > j_{ik} \wedge l_i + j_s - s = l_s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = (\mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6, s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = (\mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5, s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$j_{sa}^{iss} j_{ik} j_{sa} j_i = \sum_{k=1}^{(l_s)} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_s)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s}^{(n)} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(n)} \sum_{j_i=j_{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(n)} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$



$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 5 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 5 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$

$$\sum_{k=1}^{\sum_{i=1}^{(l_s)} (j_{sa}^i - j_{sa} + 1)} \sum_{j_{ik}=j_s+j_{sa}-1}^{(n_i - j_{sa} + 1)} \sum_{j_i=j_{sa}+l_i-l_{sa}}^{(n_i - j_{sa} + 1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(n_i - j_{sa} + 1)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(n_i - j_{sa} + 1)} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}^{(n_i - j_{sa} + 1)} \frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$s \geq 5 \wedge s = s + k \wedge$

$k_z: z = 1 \wedge k = k_3) \Rightarrow$

$$f_z S_{j_s}^{iSS} j_{ik}, j_{sa}, j_i = \sum_{k=1}^{(l_s)} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_s)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j_s+l_i-l_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{(n_i-j_s+1)}$$

$$\frac{(n_i + j_{ik} - j_{sa} - j_s - j_{sa}^{ik} - I)!}{(n_i - I)! \cdot (n_{ik} + j_{sa} - j_s - s - j_{sa}^{ik})!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s \leq j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} - j_{sa} - j_{sa}^{ik} \leq j^{sa} + j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$

$(n_{ik} - j_{sa}^{ik} - 1) > l_s \wedge l_{sa} \wedge j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$D + j_i - n < l_i + l_s + j_{sa}^{ik} - n - 1 \wedge$

$((D \geq n < n) \wedge I = k > 0 \wedge$

$\{j_s, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 7 \wedge s = s + k \wedge$

$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

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$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3)) \Rightarrow$$

$$fz S_{j_s, j_{ik}, j_{sa}, j_i}^{ISS} = \sum_{k=1} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{( )}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}} \sum_{\binom{()}{j^{sa}=j_i+l_{sa}-l_i}} \sum_{l_s+s-1}^{j_i=l_{ik}+s+n-D-j_{sa}^{ik}}$$

$$\sum_{n_i=n+l_k}^n \sum_{\binom{(n_i-j_s+1)}{n_{is}=n+l_k-j_s+1}} \sum_{n_{ik}=n_{is}+j_s-j_{ik}^{ik}}$$

$$\sum_{\binom{()}{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}} \sum_{n_s=n_{sa}+j_i-j_{ik}^{ik}}$$

$$\frac{(n_i + j_{ik} + j_{sa}^s - j_s - j_{ik}^{ik} - 1)!}{(n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - j_{ik}^{ik})!}$$

$$\frac{(l_s - 2)!}{(l_s - 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - j_{ik}^{ik})!}{(D + j_{ik}^{ik} - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{ik}^{ik} \leq j_{ik} \leq j_s + j_{sa}^{ik} - j_{ik}^{ik} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} - j_{sa} - j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - s = l_{ik} \wedge l_{sa} + j_{sa} - s = l_{sa} \wedge$

$D + j_{ik}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - j_{ik}^{ik} - 1$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}^i, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 7 \wedge s = s + k \wedge$

$k_z: z = 3 \wedge k = k_2 + k_3) \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}^i, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k \wedge$

$k_z: z = 2 \wedge k = k_2 + k_3) \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}^i, \dots, k_3, j_{sa}^i\} \wedge$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = \dots) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{ISS} = \sum_{k=1}^{(\ )} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik} = j_{sa} + l_{ik} - l_{sa}}^{(l_s + j_{sa} - 1)} \sum_{(j_{sa} = l_{ik} + n + j_{sa} - D - j_{sa}^{ik})} \sum_{j_i = j_{sa} + l_i - l_{sa}}$$

$$\sum_{n_i = n + k}^n \sum_{(n_i = n + k - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{( )} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3} \frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_{ik} < n$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - j_{ik} \wedge l_i + j_{sa} - s = l_s \wedge$

$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1 \wedge$

$((D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 7 \wedge s = s + k \wedge$

$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k \wedge$

$k_z: z = 2 \wedge k = k_2 + k_3) \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 5 \wedge s = s + k \wedge$

$k_z: z = 2 \wedge k = k_1 + k_3) \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{ISS} = \sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{( )}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_s+j_{sa}^{ik}-1} \sum_{(j_{sa}=j_{ik}+l_{sa}-l_{ik})}^{( )} \sum_{j_i=j_{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-k_2)}^{( )} \sum_{n_s=n_{sa}+j_{sa}-j_i-k_3}$$

$$\frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}$$

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$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1 \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz = \sum_{j_{ik}=0}^{n-s} \sum_{j_{sa}=0}^{n-j_{ik}-j_i} \sum_{j_s=0}^{n-j_{ik}-j_{sa}-j_i} \binom{n-s}{j_{ik}} \binom{n-j_{ik}-j_{sa}}{j_{sa}} \binom{n-j_{ik}-j_{sa}-j_i}{j_s} \binom{n-j_{ik}-j_{sa}-j_i-j_s}{n+\mathbb{k}-j_s+1} \binom{n-j_{ik}-j_{sa}-j_i-j_s-j_{sa}}{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \binom{n-j_{ik}-j_{sa}-j_i-j_s-j_{sa}-j_{sa}}{n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \binom{n-j_{ik}-j_{sa}-j_i-j_s-j_{sa}-j_{sa}-j_i}{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3} \frac{(n_i + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik} - I)!}{(n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - s - j_{sa}^{ik})!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

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## DİZİN

## B

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrisinin son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,  
2.3.2.1.1.1.1.1/3-4

ilk düzgün simetrik olasılık,  
2.3.2.2.1.1.1.1/3-4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.1.1.1.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrisinin son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,  
2.3.2.1.1.1.2.1/3-4

ilk düzgün simetrik olasılık,  
2.3.2.2.1.1.2.1/3-4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.1.1.2.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrisinin son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,  
2.3.2.1.1.1.3.1/3-4

ilk düzgün simetrik olasılık,  
2.3.2.2.1.1.3.1/3-4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.1.1.3.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bir bağımlı-bir bağımsız durumlu simetrisinin son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,  
2.3.2.1.1.1.1.1/153-154

ilk düzgün simetrik olasılık,  
2.3.2.2.1.1.1.1/162-163

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.1.1.1.1/210

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bir bağımlı-bir bağımsız durumlu bağımsız simetrisinin son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,  
2.3.2.1.1.1.2.1/153-154

ilk düzgün simetrik olasılık,  
2.3.2.2.1.1.2.1/162-163

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.1.1.2.1/210

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bir bağımlı-bir bağımsız durumlu bağımlı simetrisinin son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,  
2.3.2.1.1.1.3.1/153-154

ilk düzgün simetrik olasılık,  
2.3.2.2.1.1.3.1/162-163

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.1.1.3.1/210

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu simetrisinin son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,  
2.3.2.1.1.4.1.1/3-4

ilk düzgün simetrik olasılık,  
2.3.2.2.1.4.1.1/3-4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.1.4.1.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımsız simetrisinin son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,  
2.3.2.1.1.4.2.1/3-4

ilk düzgün simetrik olasılık,  
2.3.2.2.1.4.2.1/3-4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.1.4.2.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımlı simetrisinin son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,  
2.3.2.1.1.4.3.1/3-4

ilk düzgün simetrik olasılık,  
2.3.2.2.1.4.3.1/3-4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.1.4.3.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bir bağımlı-bağımsız durumlu

simetrisinin son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,  
2.3.2.1.1.1.1.1/156-157

ilk düzgün simetrik olasılık,  
2.3.2.2.1.1.1.1/165

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.1.1.1.1/215

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bir bağımlı-bağımsız durumlu bağımsız simetrisinin son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,  
2.3.2.1.1.1.2.1/156-157

ilk düzgün simetrik olasılık,  
2.3.2.2.1.1.2.1/165

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.1.1.2.1/215

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımlı simetrisinin son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,  
2.3.2.1.1.1.3.1/156-157

ilk düzgün simetrik olasılık,  
2.3.2.2.1.1.3.1/165

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.1.1.3.1/215

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu simetrisinin son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,  
2.3.2.1.1.6.1/3-4

ilk düzgün simetrik olasılık,  
2.3.2.2.1.6.1.1/3-4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.1.6.1.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımsız simetrisinin son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,  
2.3.2.1.1.6.2.1/3-4

ilk düzgün simetrik olasılık,  
2.3.2.2.1.6.2.1/3-4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.1.6.2.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu

bağımlı simetrisinin son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,  
2.3.2.1.1.6.3.1/3-4

ilk düzgün simetrik olasılık,  
2.3.2.2.1.6.3.1/3-4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.1.6.3.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrisinin durumuna bağlı

ilk simetrik olasılık,  
2.3.2.1.1.1.1.1/77

ilk düzgün simetrik olasılık,  
2.3.2.2.1.1.1.1/61

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.1.1.1.1/106

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrisinin durumuna bağlı

ilk simetrik olasılık,  
2.3.2.1.1.1.2.1/77

ilk düzgün simetrik olasılık,  
2.3.2.2.1.1.2.1/61

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.1.1.2.1/106

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrisinin durumuna bağlı

ilk simetrik olasılık,  
2.3.2.1.1.1.3.1/77

ilk düzgün simetrik olasılık,  
2.3.2.2.1.1.3.1/61

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.1.1.3.1/106

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrisinin ilk ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,  
2.3.2.1.2.1.1.1/4

ilk düzgün simetrik olasılık,  
2.3.2.2.2.1.1.1/3-4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.2.1.1.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrisinin ilk ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,  
2.3.2.1.2.1.2.1/4

ilk düzgün simetrik olasılık,  
2.3.2.2.2.1.2.1/3-4

ilk düzgün olmayan simetrik  
olasılık, 2.3.2.3.2.1.2.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrisinin ilk ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,  
2.3.2.1.2.1.3.1/4

ilk düzgün simetrik olasılık,  
2.3.2.2.2.1.3.1/3-4

ilk düzgün olmayan simetrik  
olasılık, 2.3.2.3.2.1.3.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu simetrisinin ilk ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,  
2.3.2.1.2.2.1.1/5

ilk düzgün simetrik olasılık,  
2.3.2.2.2.2.1.1/3-4

ilk düzgün olmayan simetrik  
olasılık, 2.3.2.3.2.2.1.1/5

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımsız simetrisinin ilk ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,  
2.3.2.1.2.2.2.1/5

ilk düzgün simetrik olasılık,  
2.3.2.2.2.2.2.1/3-4

ilk düzgün olmayan simetrik  
olasılık, 2.3.2.3.2.2.2.1/5

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımlı simetrisinin ilk ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,  
2.3.2.1.2.2.3.1/4

ilk düzgün simetrik olasılık,  
2.3.2.2.2.2.3.1/3-4

ilk düzgün olmayan simetrik  
olasılık, 2.3.2.3.2.2.3.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu simetrisinin ilk ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,  
2.3.2.1.2.4.1.1/4

ilk düzgün simetrik olasılık,  
2.3.2.2.2.4.1.1/3-4

ilk düzgün olmayan simetrik  
olasılık, 2.3.2.3.2.4.1.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımsız simetrisinin ilk ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,  
2.3.2.1.2.4.2.1/4

ilk düzgün simetrik olasılık,  
2.3.2.2.2.4.2.1/3-4

ilk düzgün olmayan simetrik  
olasılık, 2.3.2.3.2.4.2.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımlı simetrisinin ilk ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,  
2.3.2.1.2.4.3.1/4

ilk düzgün simetrik olasılık,  
2.3.2.2.2.4.3.1/3-4

ilk düzgün olmayan simetrik  
olasılık, 2.3.2.3.2.4.3.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu simetrisinin ilk ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,  
2.3.2.1.2.6.1.1/4

ilk düzgün simetrik olasılık,  
2.3.2.2.2.6.1.1/3-4

ilk düzgün olmayan simetrik  
olasılık, 2.3.2.3.2.6.1.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımsız simetrisinin ilk ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,  
2.3.2.1.2.6.2.1/4

ilk düzgün simetrik olasılık,  
2.3.2.2.2.6.2.1/3-4

ilk düzgün olmayan simetrik  
olasılık, 2.3.2.3.2.6.2.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımlı simetrisinin ilk ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,  
2.3.2.1.2.6.3.1/4

ilk düzgün simetrik olasılık,  
2.3.2.2.2.6.3.1/3-4

ilk düzgün olmayan simetrik  
olasılık, 2.3.2.3.2.6.3.1/4

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımsız-bağımsız durumlu  
simetrisinin ilk ve son durumunun  
bulunabileceği olaylara göre

ilk simetrik olasılık,  
2.3.2.1.2.7.1.1/5

ilk düzgün simetrik olasılık,  
2.3.2.2.2.7.1.1/3-4

ilk düzgün olmayan simetrik  
olasılık, 2.3.2.3.2.7.1.1/5

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımsız-bağımsız durumlu  
bağımsız simetrisinin ilk ve son durumunun  
bulunabileceği olaylara göre

ilk simetrik olasılık,  
2.3.2.1.2.7.2.1/5

ilk düzgün simetrik olasılık,  
2.3.2.2.2.7.2.1/3-4

ilk düzgün olmayan simetrik  
olasılık, 2.3.2.3.2.7.2.1/5

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımsız-bağımlı durumlu  
bağımlı simetrisinin ilk ve son durumunun  
bulunabileceği olaylara göre

ilk simetrik olasılık,  
2.3.2.1.3.2.7.3.1/5

ilk düzgün simetrik olasılık,  
2.3.2.2.3.2.7.3.1/3-4

ilk düzgün olmayan simetrik  
olasılık, 2.3.2.3.3.2.7.3.1/4

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımlı durumlu simetrisinin ilk  
ve herhangi bir durumunun bulunabileceği  
olaylara göre

ilk simetrik olasılık,  
2.3.2.1.3.1.1.1/4

ilk düzgün simetrik olasılık,  
2.3.2.2.3.2.1.1/3-4

ilk düzgün olmayan simetrik  
olasılık, 2.3.2.3.3.1.1.1/4-5

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımlı durumlu bağımsız  
simetrisinin ilk ve herhangi bir durumunun  
bulunabileceği olaylara göre

ilk simetrik olasılık,  
2.3.2.1.3.1.2.1/4

ilk düzgün simetrik olasılık,  
2.3.2.2.3.2.2.1/3-4

ilk düzgün olmayan simetrik  
olasılık, 2.3.2.3.3.1.2.1/4-5

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımlı durumlu bağımlı  
simetrisinin ilk ve herhangi bir durumunun  
bulunabileceği olaylara göre

ilk simetrik olasılık,  
2.3.2.1.3.1.3.1/4

ilk düzgün simetrik olasılık,  
2.3.2.2.3.2.1/3-4

ilk düzgün olmayan simetrik  
olasılık, 2.3.2.3.3.1.3.1/4-5

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımsız-bağımlı durumlu  
simetrisinin ilk ve herhangi bir durumunun  
bulunabileceği olaylara göre

ilk simetrik olasılık,  
2.3.2.1.3.2.1.1/5

ilk düzgün simetrik olasılık,  
2.3.2.2.3.2.1.1/3-4

ilk düzgün olmayan simetrik  
olasılık, 2.3.2.3.3.2.1.1/5-6

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımsız-bağımlı durumlu  
bağımsız simetrisinin ilk ve herhangi bir  
durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,  
2.3.2.1.3.2.2.1/5

ilk düzgün simetrik olasılık,  
2.3.2.2.3.2.2.1/3-4

ilk düzgün olmayan simetrik  
olasılık, 2.3.2.3.3.2.2.1/5-6

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımsız-bağımlı durumlu  
bağımlı simetrisinin ilk ve herhangi bir  
durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,  
2.3.2.1.3.2.3.1/4

ilk düzgün simetrik olasılık,  
2.3.2.2.3.2.3.1/3-4

ilk düzgün olmayan simetrik  
olasılık, 2.3.2.3.3.2.3.1/4-5

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımlı durumlu simetrisinin  
herhangi iki durumuna bağlı

ilk simetrik olasılık,  
2.3.2.1.4.1.1.1/4

ilk düzgün simetrik olasılık,  
2.3.2.2.4.1.1.1/3-4

ilk düzgün olmayan simetrik  
olasılık, 2.3.2.3.4.1.1.1/5

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımlı durumlu bağımsız  
simetrisinin herhangi iki durumuna bağlı

ilk simetrik olasılık,  
2.3.2.1.4.1.2.1/4

ilk düzgün simetrik olasılık,  
2.3.2.2.4.1.2.1/3-4

ilk düzgün olmayan simetrik  
olasılık, 2.3.2.3.4.1.2.1/5

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımlı durumlu bağımlı  
simetrisinin herhangi iki durumuna bağlı

ilk simetrik olasılık,  
2.3.2.1.4.1.3.1/4

ilk düzgün simetrik olasılık,  
2.3.2.2.4.1.3.1/3-4

ilk düzgün olmayan simetrik  
olasılık, 2.3.2.3.4.1.3.1/5

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımlı durumlu simetrisinin her  
durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,  
2.3.2.1.4.1.1.1/701-702

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımlı durumlu bağımsız  
simetrisinin her durumunun bulunabileceği  
olaylara göre

ilk simetrik olasılık,  
2.3.2.1.4.1.2.1/701-702

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımlı durumlu bağımlı  
simetrisinin her durumunun bulunabileceği  
olaylara göre

ilk simetrik olasılık,  
2.3.2.1.4.1.3.1/701-702

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımlı durumlu simetrisinin ilk  
ve herhangi iki durumunun bulunabileceği  
olaylara göre

ilk simetrik olasılık,  
2.3.2.1.5.1.1.1/5

ilk düzgün simetrik olasılık,  
2.3.2.2.5.1.1.1/3-4

ilk düzgün olmayan simetrik  
olasılık, 2.3.2.3.5.1.1.1/6

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımlı durumlu bağımsız  
simetrisinin ilk ve herhangi iki durumunun  
bulunabileceği olaylara göre

ilk simetrik olasılık,  
2.3.2.1.5.1.2.1/5

ilk düzgün simetrik olasılık,  
2.3.2.2.5.1.2.1/3-4

ilk düzgün olmayan simetrik  
olasılık, 2.3.2.3.5.1.2.1/6

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımlı durumlu bağımlı  
simetrisinin ilk ve herhangi iki durumunun  
bulunabileceği olaylara göre

ilk simetrik olasılık,  
2.3.2.1.5.1.3.1/5

ilk düzgün simetrik olasılık,  
2.3.2.2.5.1.3.1/3-4

ilk düzgün olmayan simetrik  
olasılık, 2.3.2.3.5.1.3.1/6

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımsız-bağımlı durumlu  
simetrisinin ilk ve herhangi iki durumunun  
bulunabileceği olaylara göre

ilk simetrik olasılık,  
2.3.2.1.5.2.1.1/6-7

ilk düzgün simetrik olasılık,  
2.3.2.2.5.2.1.1/3-4

ilk düzgün olmayan simetrik  
olasılık, 2.3.2.3.5.2.1.1/8

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımsız-bağımlı durumlu  
bağımsız simetrisinin ilk ve herhangi iki  
durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,  
2.3.2.1.5.2.2.1/6-7

ilk düzgün simetrik olasılık,  
2.3.2.2.5.2.2.1/3-4

ilk düzgün olmayan simetrik  
olasılık, 2.3.2.3.5.2.2.1/8

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımsız-bağımlı durumlu  
bağımlı simetrisinin ilk ve herhangi iki  
durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,  
2.3.2.1.5.2.3.1/5

ilk düzgün simetrik olasılık,  
2.3.2.2.5.2.3.1/3-4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.5.2.3.1/6

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrisinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre herhangi iki duruma bağlı

ilk simetrik olasılık, 2.3.2.1.8.1.1.1/5

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.8.1.1.1/5

dizilimsiz bağımlı durumlu bağımsız simetrisinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre herhangi iki duruma bağlı

ilk simetrik olasılık, 2.3.2.1.8.1.2.1/5

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.8.1.2.1/5

dizilimsiz bağımlı durumlu bağımsız simetrisinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre herhangi iki duruma bağlı

ilk simetrik olasılık, 2.3.2.1.8.1.3.1/5

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.8.1.3.1/5

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu simetrisinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre herhangi iki duruma bağlı

ilk simetrik olasılık, 2.3.2.1.6.1.1/6-7

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.8.2.1.1/5

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımsız simetrisinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre herhangi iki duruma bağlı

ilk simetrik olasılık, 2.3.2.1.8.2.2.1/6-7

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.8.2.2.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımlı simetrisinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre herhangi iki duruma bağlı

ilk simetrik olasılık, 2.3.2.1.8.2.3.1/5

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.8.2.3.1/5

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık, 2.3.2.1.6.1.1.1/5

ilk düzgün simetrik olasılık, 2.3.2.2.6.1.1.1/3-4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.6.1.1.1/5

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık, 2.3.2.1.6.1.2.1/5

ilk düzgün simetrik olasılık, 2.3.2.2.6.1.2.1/3-4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.6.1.2.1/5

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık, 2.3.2.1.6.1.3.1/5

ilk düzgün simetrik olasılık, 2.3.2.2.6.1.3.1/3-4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.6.1.3.1/5

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık, 2.3.2.1.6.2.1.1/6

ilk düzgün simetrik olasılık, 2.3.2.2.6.2.1.1/3-4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.6.2.1.1/8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımsız simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık, 2.3.2.1.6.2.2.1/6



ilk düzgün simetrik olasılık,  
2.3.2.2.6.2.2.1/3-4

ilk düzgün olmayan simetrik  
olasılık, 2.3.2.3.6.2.2.1/8

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımsız-bağımlı durumlu  
bağımlı simetrisinin ilk herhangi bir ve son  
durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,  
2.3.2.1.6.2.3.1/4-5

ilk düzgün simetrik olasılık,  
2.3.2.2.6.2.3.1/3-4

ilk düzgün olmayan simetrik  
olasılık, 2.3.2.3.6.2.3.1/5

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımlı-bir bağımsız durumlu  
simetrisinin ilk herhangi bir ve son  
durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,  
2.3.2.1.6.4.1.1/5

ilk düzgün simetrik olasılık,  
2.3.2.2.6.4.1.1/3-4

ilk düzgün olmayan simetrik  
olasılık, 2.3.2.3.6.4.1.1/5

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımlı-bir bağımsız durumlu  
bağımsız simetrisinin ilk herhangi bir ve son  
durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,  
2.3.2.1.6.4.2.1/5

ilk düzgün simetrik olasılık,  
2.3.2.2.6.4.2.1/3-4

ilk düzgün olmayan simetrik  
olasılık, 2.3.2.3.6.4.2.1/5

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımlı-bir bağımsız durumlu  
bağımlı simetrisinin ilk herhangi bir ve son  
durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,  
2.3.2.1.6.4.3.1/5

ilk düzgün simetrik olasılık,  
2.3.2.2.6.4.3.1/3-4

ilk düzgün olmayan simetrik  
olasılık, 2.3.2.3.6.4.3.1/5

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımlı-bağımsız durumlu  
simetrisinin ilk herhangi bir ve son  
durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,  
2.3.2.1.6.6.1.1/5

ilk düzgün simetrik olasılık,  
2.3.2.2.6.6.1.1/3-4

ilk düzgün olmayan simetrik  
olasılık, 2.3.2.3.6.6.1.1/5

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımlı-bağımsız durumlu  
bağımsız simetrisinin ilk herhangi bir ve son  
durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,  
2.3.2.1.6.6.2.1/5

ilk düzgün simetrik olasılık,  
2.3.2.2.6.6.2.1/3-4

ilk düzgün olmayan simetrik  
olasılık, 2.3.2.3.6.6.2.1/5

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımlı-bağımsız durumlu  
bağımlı simetrisinin ilk herhangi bir ve son  
durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,  
2.3.2.1.6.6.3.1/5

ilk düzgün simetrik olasılık,  
2.3.2.2.6.6.3.1/3-4

ilk düzgün olmayan simetrik  
olasılık, 2.3.2.3.6.6.3.1/5

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımsız-bağımsız durumlu  
simetrisinin ilk herhangi bir ve son  
durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,  
2.3.2.1.6.7.1.1/6

ilk düzgün simetrik olasılık,  
2.3.2.2.6.7.1.1/3-4

ilk düzgün olmayan simetrik  
olasılık, 2.3.2.3.6.7.1.1/8

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımsız-bağımsız durumlu  
bağımlı simetrisinin ilk herhangi bir ve son  
durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,  
2.3.2.1.6.7.2.1/6

ilk düzgün simetrik olasılık,  
2.3.2.2.6.7.2.1/3-4

ilk düzgün olmayan simetrik  
olasılık, 2.3.2.3.6.7.2.1/8

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımsız-bağımsız durumlu  
bağımlı simetrisinin ilk herhangi bir ve son  
durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,  
2.3.2.1.6.7.3.1/4-5

ilk düzgün simetrik olasılık,  
2.3.2.2.6.7.3.1/3-4

ilk düzgün olmayan simetrik  
olasılık, 2.3.2.3.6.7.3.1/5

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımlı durumlu simetrisinin ilk  
herhangi bir ve son durumunun  
bulunabileceği olaylara göre herhangi bir  
ve son duruma bağlı

ilk simetrik olasılık,  
2.3.2.1.9.1.1.1/5

ilk düzgün olmayan simetrik  
olasılık, 2.3.2.3.9.1.1.1/5

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımlı durumlu bağımsız  
simetrisinin ilk herhangi bir ve son  
durumunun bulunabileceği olaylara göre  
herhangi bir ve son duruma bağlı

ilk simetrik olasılık,  
2.3.2.1.9.1.2.1/5

ilk düzgün olmayan simetrik  
olasılık, 2.3.2.3.9.1.2.1/5

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımlı durumlu bağımlı  
simetrisinin ilk herhangi bir ve son  
durumunun bulunabileceği olaylara göre  
herhangi bir ve son duruma bağlı

ilk simetrik olasılık,  
2.3.2.1.9.1.3.1/5

ilk düzgün olmayan simetrik  
olasılık, 2.3.2.3.9.1.3.1/5

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımsız-bağımlı durumlu  
simetrisinin ilk herhangi bir ve son  
durumunun bulunabileceği olaylara göre  
herhangi bir ve son duruma bağlı

ilk simetrik olasılık,  
2.3.2.1.9.2.1.1/6

ilk düzgün olmayan simetrik  
olasılık, 2.3.2.3.9.2.1.1/7

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımsız-bağımlı durumlu  
bağımsız simetrisinin ilk herhangi bir ve son  
durumunun bulunabileceği olaylara göre  
herhangi bir ve son duruma bağlı

ilk simetrik olasılık,  
2.3.2.1.9.2.2.1/6

ilk düzgün olmayan simetrik  
olasılık, 2.3.2.3.9.2.2.1/7

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımsız-bağımlı durumlu  
bağımlı simetrisinin ilk herhangi bir ve son  
durumunun bulunabileceği olaylara göre  
herhangi bir ve son duruma bağlı

ilk simetrik olasılık,  
2.3.2.1.9.2.3.1/4-5

ilk düzgün olmayan simetrik  
olasılık, 2.3.2.3.9.2.3.1/5

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımlı-bağımsız durumlu  
simetrisinin ilk herhangi bir ve son  
durumunun bulunabileceği olaylara göre  
herhangi bir ve son duruma bağlı

ilk simetrik olasılık,  
2.3.2.1.9.4.1.1/5

ilk düzgün olmayan simetrik  
olasılık, 2.3.2.3.9.4.1.1/7

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımlı-bağımsız durumlu  
bağımsız simetrisinin ilk herhangi bir ve son  
durumunun bulunabileceği olaylara göre  
herhangi bir ve son duruma bağlı

ilk simetrik olasılık,  
2.3.2.1.9.4.2.1/5

ilk düzgün olmayan simetrik  
olasılık, 2.3.2.3.9.4.2.1/7

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımlı-bağımsız durumlu  
bağımlı simetrisinin ilk herhangi bir ve son  
durumunun bulunabileceği olaylara göre  
herhangi bir ve son duruma bağlı

ilk simetrik olasılık,  
2.3.2.1.9.4.3.1/5

ilk düzgün olmayan simetrik  
olasılık, 2.3.2.3.9.4.3.1/7

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımlı-bağımsız durumlu  
simetrisinin ilk herhangi bir ve son  
durumunun bulunabileceği olaylara göre  
herhangi bir ve son duruma bağlı

ilk simetrik olasılık,  
2.3.2.1.9.6.1.1/5

ilk düzgün olmayan simetrik  
olasılık, 2.3.2.3.9.6.1.1/7

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımlı-bağımsız durumlu  
bağımsız simetrisinin ilk herhangi bir ve son  
durumunun bulunabileceği olaylara göre  
herhangi bir ve son duruma bağlı

ilk simetrik olasılık,  
2.3.2.1.9.6.2.1/5

ilk düzgün olmayan simetrik  
olasılık, 2.3.2.3.9.6.2.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımlı simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı

ilk simetrik olasılık,  
2.3.2.1.9.6.3.1/5

ilk düzgün olmayan simetrik  
olasılık, 2.3.2.3.9.6.3.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı

ilk simetrik olasılık,  
2.3.2.1.9.7.1.1/6

ilk düzgün olmayan simetrik  
olasılık, 2.3.2.3.9.7.1.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu bağımsız simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı

ilk simetrik olasılık,  
2.3.2.1.9.7.2.1/6

ilk düzgün olmayan simetrik  
olasılık, 2.3.2.3.9.7.2.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu bağımlı simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı

ilk simetrik olasılık,  
2.3.2.1.9.7.3.1/4

ilk düzgün olmayan simetrik  
olasılık, 2.3.2.3.9.7.3.1/5

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,  
2.3.2.1.7.1.1.1/5

ilk düzgün simetrik olasılık,  
2.3.2.2.7.1.1.1/3-4

ilk düzgün olmayan simetrik  
olasılık, 2.3.2.3.7.1.1.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,  
2.3.2.1.7.1.2.1/5

ilk düzgün simetrik olasılık,  
2.3.2.2.7.1.2.1/3-4

ilk düzgün olmayan simetrik  
olasılık, 2.3.2.3.7.1.2.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,  
2.3.2.1.7.1.3.1/5

ilk düzgün simetrik olasılık,  
2.3.2.2.7.1.3.1/3-4

ilk düzgün olmayan simetrik  
olasılık, 2.3.2.3.7.1.3.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,  
2.3.2.1.7.2.1.1/7

ilk düzgün simetrik olasılık,  
2.3.2.2.7.2.1.1/3-4

ilk düzgün olmayan simetrik  
olasılık, 2.3.2.3.7.2.1.1/10-11

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımsız simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,  
2.3.2.1.7.2.2.1/7

ilk düzgün simetrik olasılık,  
2.3.2.2.7.2.2.1/3-4

ilk düzgün olmayan simetrik  
olasılık, 2.3.2.3.7.2.2.1/10-11

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımlı simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,  
2.3.2.1.7.2.3.1/5

ilk düzgün simetrik olasılık,  
2.3.2.2.7.2.3.1/3-4

ilk düzgün olmayan simetrik  
olasılık, 2.3.2.3.7.2.3.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık, 2.3.2.1.7.4.1.1/5

ilk düzgün simetrik olasılık, 2.3.2.2.7.4.1.1/3-4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.7.4.1.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımsız simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık, 2.3.2.1.7.4.2.1/5

ilk düzgün simetrik olasılık, 2.3.2.2.7.4.2.1/3-4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.7.4.2.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımlı simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık, 2.3.2.1.7.4.3.1/5

ilk düzgün simetrik olasılık, 2.3.2.2.7.4.3.1/3-4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.7.4.3.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımsız simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık, 2.3.2.1.7.6.1.1/5

ilk düzgün simetrik olasılık, 2.3.2.2.7.6.1.1/3-4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.7.6.1.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımlı simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık, 2.3.2.1.7.6.2.1/5

ilk düzgün simetrik olasılık, 2.3.2.2.7.6.2.1/3-4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.7.6.2.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımlı simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık, 2.3.2.1.7.6.3.1/5

ilk düzgün simetrik olasılık, 2.3.2.2.7.6.3.1/3-4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.7.6.3.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu bağımsız simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık, 2.3.2.1.7.7.1.1/7

ilk düzgün simetrik olasılık, 2.3.2.2.7.7.1.1/3-4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.7.7.1.1/10-11

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu bağımlı simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık, 2.3.2.1.7.7.2.1/7

ilk düzgün simetrik olasılık, 2.3.2.2.7.7.2.1/3-4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.7.7.2.1/10-11

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu bağımlı simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık, 2.3.2.1.7.7.3.1/5

ilk düzgün simetrik olasılık, 2.3.2.2.7.7.3.1/3-4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.7.7.3.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

ilk simetrik olasılık, 2.3.2.1.10.1.1.1/5

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.10.1.1.1/5-6

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

ilk simetrik olasılık, 2.3.2.1.10.1.2.1/5

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.10.1.2.1/5-6

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

ilk simetrik olasılık, 2.3.2.1.10.1.3.1/5

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.10.1.3.1/5-6

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

ilk simetrik olasılık, 2.3.2.1.10.2.1.1/7

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.10.2.1.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımsız simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

ilk simetrik olasılık, 2.3.2.1.10.2.2.1/7

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.10.2.2.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımlı simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

ilk simetrik olasılık, 2.3.2.1.10.2.3.1/5

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.10.2.3.1/5-6

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

ilk simetrik olasılık, 2.3.2.1.10.4.1.1/5

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.10.4.1.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımsız simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

ilk simetrik olasılık, 2.3.2.1.10.4.2.1/5

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.10.4.2.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımlı simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

ilk simetrik olasılık, 2.3.2.1.10.4.3.1/5

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.10.4.3.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

ilk simetrik olasılık, 2.3.2.1.10.6.1.1/5

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.10.6.1.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımsız simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

ilk simetrik olasılık, 2.3.2.1.10.6.2.1/5

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.10.6.2.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımlı simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

ilk simetrik olasılık, 2.3.2.1.10.6.3.1/5

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.10.6.3.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

ilk simetrik olasılık, 2.3.2.1.10.7.1.1/7

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.10.7.1.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu bağımsız simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

ilk simetrik olasılık, 2.3.2.1.10.7.2.1/7

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.10.7.2.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu bağımlı simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

ilk simetrik olasılık, 2.3.2.1.10.7.3.1/5

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.10.7.3.1/5-6

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

ilk simetrik olasılık, 2.3.2.1.11.1.1.1/6

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.11.1.1.1/6

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

ilk simetrik olasılık, 2.3.2.1.11.1.2.1/6

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.11.1.2.1/6

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

ilk simetrik olasılık, 2.3.2.1.11.1.3.1/6

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.11.1.3.1/6

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

ilk simetrik olasılık, 2.3.2.1.11.2.1.1/8-9

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.11.2.1.1/9

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımsız simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

ilk simetrik olasılık, 2.3.2.1.11.2.2.1/9

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.11.2.2.1/9

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımlı simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

ilk simetrik olasılık, 2.3.2.1.11.2.3.1/6

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.11.2.3.1/6

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

ilk simetrik olasılık, 2.3.2.1.11.4.1.1/6

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.11.4.1.1/9

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımsız simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

ilk simetrik olasılık, 2.3.2.1.11.4.2.1/6

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.11.4.2.1/9

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımlı simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

ilk simetrik olasılık,

2.3.2.1.11.4.3.1/6

ilk düzgün olmayan simetrik

olasılık, 2.3.2.3.11.4.3.1/9

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

ilk simetrik olasılık,

2.3.2.1.11.6.1.1/6

ilk düzgün olmayan simetrik

olasılık, 2.3.2.3.11.6.1.1/9

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımsız simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

ilk simetrik olasılık,

2.3.2.1.11.6.2.1/6

ilk düzgün olmayan simetrik

olasılık, 2.3.2.3.11.6.2.1/9

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımlı simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

ilk simetrik olasılık,

2.3.2.1.11.6.3.1/6

ilk düzgün olmayan simetrik

olasılık, 2.3.2.3.11.6.3.1/9

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

ilk simetrik olasılık,

2.3.2.1.11.7.1.1/8-9

ilk düzgün olmayan simetrik

olasılık, 2.3.2.3.11.7.1.1/9

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu bağımsız simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

ilk simetrik olasılık,

2.3.2.1.11.7.2.1/8-9

ilk düzgün olmayan simetrik

olasılık, 2.3.2.3.11.7.2.1/9

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu bağımlı simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

ilk simetrik olasılık,

2.3.2.1.11.7.3.1/6

ilk düzgün olmayan simetrik

olasılık, 2.3.2.3.11.7.3.1/6

VDOİHİ'de Olasılık ve İhtimal konularının tanım ve eşitlikleri verilmektedir. Ayrıca VDOİHİ'de olasılık ve ihtimalin uygulama alanlarına da yer verilmektedir. VDOİHİ konu anlatım ciltleri ve soru, problem ve ispat çözümlerinden oluşmaktadır. Bu cilt bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz olasılık dağılımlardan, bağımsız olasılıklı durumla başlayıp ilk bağımlı durumu bağımlı olasılıklı dağılımın ilk bağımlı durumu olan ve bağımlı olasılıklı dağılımın ilk bağımlı durumuyla başlayan dağılımlarda, simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre ilk düzgün simetrik olasılık tanım ve eşitliklerinden oluşmaktadır.

VDOİHİ Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumu simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre ilk düzgün simetrik olasılık kitabında, bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz dağılımlardan, bağımsız olasılıklı durumla başlayıp ilk bağımlı durumu bağımlı olasılıklı dağılımın ilk bağımlı durumu olan ve bağımlı olasılıklı dağılımın ilk bağımlı durumuyla başlayan dağılımlarda, simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre ilk düzgün simetrik olasılığın, tanım ve eşitlikleri verilmektedir.

VDOİHİ'nin diğer ciltlerinde olduğu gibi bu ciltte de verilen eşitlikler, olasılık tablolarından elde edilen verilerle üretilmiştir. Diğer eşitlikler ise ana eşitliklerden teorik yöntemle üretilmiştir. Eşitlik ve tanımların üretilmesinde dış kaynak kullanılmamıştır.