

VDOİHİ

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

Cilt 2.3.1.2.7.1.1.67

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 toplam düzgün simetrik olasılık Cilt 2.3.1.2.7.1.1.67

İsmail YILMAZ

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1. Bağımlı durumlu simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre toplam 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.

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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

I : simetrisinin bağımsız durum sayısı

ll : simetrisinin bağımlı durumlarından önce bulunan bağımsız durum sayısı

I : simetrisinin bağımlı durumlarından sonra bulunan bağımsız durum sayısı

lk : simetrisinin 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_i : simetrisinin ilk bağımlı durumunun, bağımlı olasılık farklı dizilimsiz dağılımın son olayı için sırası. Simetrisinin sonuncu bağımlı olayındaki durumun, bağımlı olasılık farklı dizilimsiz dağılımlardaki sırası

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

l_s : simetrisinin ilk bağımlı durumunun, bağımlı olasılıklı farklı dizilimsiz

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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bağımlı simetrisinin ilk ve herhangi bir durumunun bulunabileceği olaylara göre simetrik olasılık

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$fz S_{j_i}^{DSD}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu

simetrisinin son durumunun bulunabileceği olaylara göre toplam düzgün simetrik olasılık

$fz S_{j_i, 0}^{DSD}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrisinin son durumunun bulunabileceği olaylara göre toplam düzgün simetrik olasılık

$fz S_{j_i, D}^{DSD}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrisinin son durumunun bulunabileceği olaylara göre toplam düzgün simetrik olasılık

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$fz S_{j^{sa}}^{DSD}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrisinin durumuna bağlı toplam düzgün simetrik olasılık

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

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simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre toplam düzgün olmayan simetrik olasılık

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$fz, 0S_{\Rightarrow j_s, j_{ik}, j^{sa}, j_i}^{DOSD}$: 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 toplam düzgün olmayan simetrik olasılık

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$fz,0S_{\Rightarrow j_s, \Rightarrow j_{ik}, j^{sa}, j_i, D}^{DOSD}$: 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 toplam düzgün olmayan simetrik olasılık

${}^0S_{fz \Rightarrow j_s, \Rightarrow j_{ik}, j^{sa}, j_i}^{DOSD}$: 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 toplam düzgün olmayan simetrik olasılık

${}^0S_{fz \Rightarrow j_s, \Rightarrow j_{ik}, j^{sa}, j_i, 0}^{DOSD}$: 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 toplam düzgün olmayan simetrik olasılık

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E2

BAĞIMLI ve BİR BAĞIMSIZ OLASILIKLI FARKLI DİZİLİMSİZ DAĞILIMLAR

Bağımlı ve Bir Bağımsız Olasılıklı Farklı Dizilimsiz Dağılımlar

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

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

Farklı dizilimli dağılımlar, dağılımın ilk durumuyla başlayan (bunun yerine farklı dizilimli dağılımlarda simetriden 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 simetriden 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 adlandırılmasına 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 düzenlenerek büyüğe-küçüğe sıralanan dağılımlar için de simetrik olasılık eşitlikleri elde edilecektir.

Bu şekilde bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz dağılımlarda, simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre toplam düzgün simetrik eşitlikleri verilmektedir.

SİMETRİDEN SEÇİLEN DÖRT DURUMA GÖRE TOPLAM DÜZGÜN SİMETRİK OLASILIK

$$\begin{aligned}
 & ((D \geq n < n \wedge l_s \leq D - n + 1 \wedge \\
 & 1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\
 & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge \\
 & l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge \\
 & l_i > D + l_{sa} + s - n - j_{sa}) \vee
 \end{aligned}$$

$$\begin{aligned}
 & ((D \geq n < n \wedge l_s \leq D - n + 1 \wedge \\
 & 1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\
 & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge \\
 & l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge \\
 & l_i > D + l_s + s - n - 1) \vee
 \end{aligned}$$

$$\begin{aligned}
 & ((D \geq n < n \wedge l_s \leq D - n + 1 \wedge \\
 & 1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\
 & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge \\
 & l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge \\
 & l_{ik} > D + l_s + j_{sa}^{ik} - n - 1) \vee
 \end{aligned}$$

$$\begin{aligned}
 & ((D \geq n < n \wedge l_s \leq D - n + 1 \wedge \\
 & 1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\
 & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge \\
 & l_i - s + 1 = l_s \wedge \\
 & l_i > D + l_s + j_{sa}^{ik} - n - 1)) \wedge
 \end{aligned}$$

$$\begin{aligned}
 & ((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge \\
 & s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge \\
 & s \geq 7 \wedge s = s + \mathbb{k} \wedge
 \end{aligned}$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$fz_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = 0$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$\sum_{(n_{sa}=n_i-j_s+k-\mathbb{k}_2)}^{()} \sum_{n_s=n_i-j_s+k-\mathbb{k}_3}^{()}$$

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

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

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

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

$$D > n < n \wedge I = \mathbb{k} > D - n + 1 \wedge$$

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

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

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

$$((n \geq n_i - n \wedge I = \mathbb{k} > 0 \wedge$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$(\mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$f_z^{S^{DSD}}_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=0}^{D-n+1} \sum_{j_s=j_{ik}-j_{sa}^{ik}+1}^{j_{ik}-j_{sa}^{ik}+1} \binom{D-n+1-k}{k} \binom{j_{ik}-j_{sa}^{ik}+1}{j_s} \binom{j_{ik}-j_{sa}^{ik}+1}{j_i} \binom{j_{sa}}{j_{sa}-j_s} \binom{j_{sa}}{j_{sa}-j_i} \binom{j_{sa}}{j_{sa}-j_s-j_i} \binom{j_{sa}}{j_{sa}-j_s-j_i-k_1} \binom{j_{sa}}{j_{sa}-j_s-j_i-k_2} \binom{j_{sa}}{j_{sa}-j_s-j_i-k_3} \frac{(n_i+2 \cdot j_{sa}+j_{sa}^{ik}-j_s-j_{ik}-s-2 \cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2)!}{(n_i-n-\mathbb{k}_1-\mathbb{k}_2)!} \frac{1}{(n+2 \cdot j_{sa}+j_{sa}^s+j_{sa}^{ik}-j_s-j_{ik}-s-2 \cdot j_{sa})!} \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!}$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$\frac{(l_s - k_1 - k_2)!}{(l_s - j_s - k_1 - k_2 + 1)! \cdot (j_s - 2)!}$$

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

$$D \geq n < n \wedge l_s > D - n + k_1 \wedge$$

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

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

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

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

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

$$s \geq 7 \wedge s = s + k_1 \wedge$$

$$k_1: z = 2 \wedge k = k_1 + k_2 + k_3) \vee$$

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

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

$$s \geq 6 \wedge s = s + k_1 \wedge$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$D > n < n \wedge I = \mathbb{k} > D - n + 1 \wedge$

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

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

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

$((n \geq n_i - n \wedge I = \mathbb{k} > 0 \wedge$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$\mathbb{k}_2: 2 \leq 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$

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

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

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

$(\mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$f_z^{S^{DSD}}_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=0}^{D-n+1} \sum_{j_s=j_{ik}-j_{sa}^{ik}+1}^{j_{sa}-k} \sum_{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}^{j_{sa}-k} \sum_{j_i=j_{sa}+s-j_{sa}}^{j_{sa}-k} \sum_{n_i=0}^n \sum_{n_{ik}=n_i+j_s-1}^{(n_i+1)} \sum_{n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}^{(n_i+1)} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}^{(n_i+1)} \frac{(n_i+2 \cdot j_{sa}+j_{sa}^{ik}-j_s-j_{ik}-s-2 \cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2)!}{(n_i-n-\mathbb{k}_1-\mathbb{k}_2)!} \cdot \frac{1}{(n+2 \cdot j_{sa}+j_{sa}^s+j_{sa}^{ik}-j_s-j_{ik}-s-2 \cdot j_{sa})!} \cdot \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!}$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$D > n < n \wedge l_s > n +$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$\frac{(l_s - k - k_1 - k_2)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

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

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

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

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

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

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

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

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

$$k_1 = k \wedge k = k_1 + k_2 + k_3) \vee$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j_{sa}=l_i+n+j_{sa}-D-s)}^{(l_{sa}-k+1)} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{()}} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + 2 \cdot j_{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)!}$$

$$\frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - l_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\}$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$f_z^{DSD} S_{j_s, j_{ik}, j_{sa}}^{DSD} = \sum_{k=1}^{D-1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{sa}=k-j_{sa}^{ik}+1}^{j_{sa}-k-j_{sa}^{ik}+1} \sum_{j_{ik}=j_{sa}^{ik}-j_{sa}}^{j_{sa}-j_{sa}} (j_{sa}=l_i+n+j_{sa}-D-s) j_i=j_{sa}^{ik}+s-j_{sa}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j_{sa}^{ik}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)!}$$

$$\frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{j_{ik}=j_{sa}+j_{sa}^{sa}}^{(l_s+j_{sa}-k)} \sum_{j_{sa}=n+j_{sa}-D}^{(n+j_{sa}-D)} \sum_{j_s=j_{sa}}^{(l_s-j_{sa})} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n_{is}+j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3} \frac{(n_i + 2 \cdot j_{sa}^s + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)!} \cdot \frac{1}{(n_i + 2 \cdot j_{sa}^s + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - s \wedge j_{sa}^s + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z^{SDSD} S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(l_i+j_{sa}-k-s+1)} \sum_{(j^{sa}=l_{sa}+n-D)} \sum_{j_i=j^{sa}+s-j_{sa}}^{()}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_i-j_s-k}^{(n_i-j_s-k-1)}$$

$$\sum_{(n_{sa}=n_i-j_s-k)}^{()} \sum_{n_s=n_i-j_s-k}^{()} \sum_{(j_s=j_i-k_3)}^{()}$$

$$\frac{(n_i + 2 \cdot j^{sa} \cdot j_{sa}^s + j_{sa}^{ik} \cdot j_i - j_{ik} \cdot j_s - 2 \cdot j_{sa} \cdot j_i - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)!}$$

$$\frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik}) \cdot (j_s - j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D > n < n \wedge I = \mathbb{k} > D - n + 1 \wedge$$

$$2 \leq j_i \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa}^{ik} \leq j^{sa} \leq j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 \leq l_i \wedge l_i + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((n \geq n) \wedge n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 1 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_1, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{()}$$

$$\sum_{j_{ik} = j_{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j_{sa} = l_{sa} + n - D)}^{(l_{ik} + j_{sa} - k - j_{sa}^{ik} + 1)} \sum_{j_i = j_{sa} + s - j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{i_s}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{i_s}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_2}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)!}$$

$$\frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(-k-1)!}{(l_s - j_s - \dots + 1)! \cdot (j_s - \dots)}$$

$$\frac{(D - \dots)}{(D - j_i - n - \dots)(n - j_i)!}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} - j^{sa} + j_{sa}^{ik} - j_s \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + \dots - s \wedge j_s + s - j_s \leq j_i \leq \dots \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa} - j_{sa} = l_{ik} \wedge \dots + j_{sa} - s = l_{sa} \wedge$

$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 7 \wedge s = s + \dots \wedge$

$\mathbb{k}_2: \dots \wedge \mathbb{k} = \mathbb{k}_1 + \dots + \mathbb{k}_3) \vee$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + \dots \wedge$

$(\mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + \dots \wedge$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\}$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \vee$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j_{sa}=l_{sa}+n-D)}^{(l_s+j_{sa}-k)} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)!}$$

$$\frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3 \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3 \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$j_{sa}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}^{sa} = l_i + j_{sa} - k - s + 1}^{(l_i + j_{sa} - k - s + 1)} \sum_{(j_{sa} = l_{ik} + n + j_{sa} - D - j_{sa}^{ik})}^{(l_i + j_{sa} - k - s + 1)} \sum_{j_i = j_{sa} + s - j_{sa}}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)}^{()} \sum_{n_s = n_{sa} + j_{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)!}$$

$$\frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z^{DSD} S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=0}^{D-n+1} \sum_{j_s=j_{ik}-j_{sa}^{ik}+1}^{j_{ik}-j_{sa}^{ik}+1-k} \sum_{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}^{j_{sa}+j_{sa}^{ik}-j_{sa}} \sum_{j_i=j_{sa}+s-j_{sa}}^{j_{sa}+s-j_{sa}-k+1} \sum_{n_i=0}^n \sum_{n_{ik}=n_{is}+j_s+1}^{(n_{is}+1)+j_s+1} \sum_{n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}^{(n_{is}+1)+j_s+1} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}^{(n_{is}+1)+j_s+1} \frac{(n_i+2 \cdot j_{sa}+j_{sa}^{ik}-j_s-j_{ik}-s-2 \cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2)!}{(n_i-n-\mathbb{k}_1-\mathbb{k}_2)!} \cdot \frac{1}{(n+2 \cdot j_{sa}+j_{sa}^s+j_{sa}^{ik}-j_s-j_{ik}-s-2 \cdot j_{sa})!} \cdot \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{()}$$

$$\sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}}^{(l_s + j_{sa} - k)} \sum_{(j^{sa} = l_{ik} + n + j_{sa} - D - j_{sa}^{ik})} \sum_{j_i = n + s - j_{sa}}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{i_s} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{(j_{ik} = n_{i_s} + j_s - j_{ik})}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^{ik} + j_{sa}^{ik} - j_s - j_{ik} - s - j_{sa} - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)!}$$

$$\frac{(n + j^{sa} + j_{sa}^{ik} + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!}{(l_s - k - 1)! \cdot (l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > n + 1$$

$$2 \leq j_s - j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} - n + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} + j_{sa}^{ik} - 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge l_s > n + 1 \wedge l = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3)) \Rightarrow$$

$$fz_{j_s, j_{ik}, j^{sa}, j_i}^{SDSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(l_i+j_{sa}-k-s+1)} \sum_{(j^{sa}=l_s+n+j_{sa}-D-1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - k_1 - k_2)!}{(n_i - n - k_1 - k_2)!}$$

$$\frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_i - j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(l_s - k_1 - k_2)!}{(l_s - j_s - k_1 - k_2 + 1)! \cdot (j_s - 2)!}$$

$$\frac{(n - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + k_1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq l_s \leq j_i + j_{sa} - j_{sa}^{ik} \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_i - j_{sa}^{ik} + k_1 = l_s \wedge l_s + j_{sa}^{ik} - j_{sa} = l_i \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge l_s > D - n + k_1) \wedge k_1 > 0)$$

$$s: \{j_{sa}^{ik}, k_1, j_{sa}^{ik}, k_2, j_{sa}^{ik}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k_1 \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge l_s = k_1 > 0 \wedge$$

$$s: \{j_{sa}^{ik}, k_2, j_{sa}^{ik}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k_1 \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge l_s = k_2 > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \vee$$

$$fz S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(l_{sa}-k+1)}^{(l_{sa}-k+1)} \sum_{j_i=j_{sa}+s-j_{sa}}^{(j_{sa}=l_s+n+j_{sa}-D-1)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa} - k_1 - k_2)!}{(n_i - n - k_1 - k_2)!}$$

$$\frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa} - k_1 - k_2)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_s)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - j_s \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} - j_{sa}^{ik} \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} - k_1 + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(l_{ik}+j_{sa}-k-j_{sa}^{ik}+1)} \sum_{(j_{sa}=l_s+n+j_{sa}-D-1)} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + 2 \cdot j_{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)!}$$

$$\frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - l_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\}$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$f_z^{DSD} S_{j_s, j_{ik}, j_{sa}}^{DSD} = \sum_{k=1}^{D-1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$l_i^{ik-k-s+1} \sum_{(j_{ik}=l_i+n_{sa}^{ik}-D-s)}^{()}\sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()}\sum_{j_i=j_{sa}^s+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik})}^{()}\sum_{n_s=n_{sa}+j_{sa}^s-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + 2 \cdot j_{sa}^s + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)!}$$

$$\frac{1}{(n + 2 \cdot j_{sa}^s + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \binom{D-n+1}{j_s=j_{ik}-k+1}$$

$$\sum_{j_{sa}=l_{sa}+j_{sa}^{ik}-k-j_{sa}+1} \binom{()}{j_{sa}=l_{sa}+n+j_{sa}^{ik}-j_{sa}} \sum_{j_{sa}=l_{sa}+n+j_{sa}^{ik}-j_{sa}} \binom{()}{j_{sa}=l_{sa}+n+j_{sa}^{ik}-j_{sa}} \sum_{j_{sa}=l_{sa}+n+j_{sa}^{ik}-j_{sa}} \binom{()}{j_{sa}=l_{sa}+n+j_{sa}^{ik}-j_{sa}}$$

$$\sum_{n_{is}=n+\mathbb{k}}^n \binom{(n_i-j_s+1)}{n_{is}=n+\mathbb{k}} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \binom{()}{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \binom{()}{n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3} \binom{()}{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + 2 \cdot j_{sa}^s + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)!}$$

$$\frac{1}{(n + 2 \cdot j_{sa}^s + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z^{S^{DSD}}_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-k+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j^{sa}+s-j_{sa}}^{()}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} n_{ik} \sum_{(j_s=j_{ik}-k-k_1)}^{()}$$

$$\sum_{(n_{sa}=n_{ik}-k-k_1)}^{()} \sum_{(n_s=j_{sa}+j_i-k_3)}^{()}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_{ik} - s - 2 \cdot j_{sa} - k_2)!}{(n_i - n - k_1 - k_2)!}$$

$$\frac{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!}{(l_s - k - 1)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D > n < n \wedge I = \mathbb{k} > D - n + 1 \wedge$$

$$2 \leq i \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa}^{ik} \leq j^{sa} \leq j_{ik} + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 \leq l_i \wedge l_i + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((n_i \geq n - n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_1, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=l_s+n+j_{sa}^{ik}-D-1}^{l_s+j_{sa}^{ik}-k} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{i_s}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{i_s}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_2} \frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)!} \cdot \frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!} \cdot \frac{(l_s - j_s - \mathbb{k}_1 - 1)! \cdot (j_s - 2 \cdot \mathbb{k}_1 - 1)!}{(D - n - \mathbb{k}_1 - \mathbb{k}_2 - n - j_i)!}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} - j^{sa} + j_{sa}^{ik} - j_s \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j_s + s - j_s \leq j_i \leq j_s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa} - j_{sa} = l_{ik} \wedge l_s + j_{sa} - s = l_{sa} \wedge$

$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 7 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_2: 2 \leq 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + \mathbb{k} \wedge$

$(\mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + \mathbb{k} \wedge$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\}$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \vee$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_{sa}+j_{sa}^{ik}-k-j_{sa}+1} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j_{sa}-j_i-k_3}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)!}$$

$$\frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3 \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

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$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$j_{sa}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$= \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{l_{ik}+1} \sum_{(j_i=j_{sa}+s-j_{sa})}^{()}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{()}. \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)!}$$

$$\frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z^{S^{DSD}}_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=0}^{D-n+1} \sum_{j_s=j_{ik}-j_{sa}^{ik}+1}^{j_s+k}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D}^{j_{ik}+k} \binom{j_{sa}+j_{ik}-j_{sa}^{ik}}{j_{sa}+j_{ik}-j_{sa}^{ik}} \sum_{j_i=j_{sa}+s-j_{sa}}^{j_i+k}$$

$$\sum_{n_i=0}^n \binom{n_i+1}{n_i} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{n_{ik}+1} \sum_{n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-\mathbb{k}_2}^{n_{sa}+1} \sum_{n_s=n_{sa}+j_{sa}^{ik}-j_i-\mathbb{k}_3}^{n_s+1}$$

$$\frac{(n_i + 2 \cdot j_{sa} + j_{sa}^{ik} + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)!}$$

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$$\frac{1}{(n + 2 \cdot j_{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{()}$$

$$\sum_{j_{ik} = l_{sa} + n + j_{sa}^{ik} - D - j_{sa}}^{l_i + j_{sa}^{ik} - k - s + 1} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}^{()} \sum_{j_i = j_s + s - j_{sa}}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{j_{ik} = n_{is} + j_s - j_{ik}}$$

$$\sum_{(n_s = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)}^{()} \sum_{n_s = n_{sa} + j_s - j_i - \mathbb{k}_3}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^{ik} + j_{sa}^{ik} - j_s - j_{sa} - s - j_{sa} - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)!}$$

$$\frac{(n + j^{sa} + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!}{(l_s - k - 1)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > n + 1$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1, j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa}, j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} - 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge l_s > n + 1 \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3)) \Rightarrow$$

$$f_z^{SDSD} S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa}}^{l_{ik}-k+1} \sum_{(j_{sa}^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j_{sa}+s-j_{sa}} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-k_2)} \sum_{n_s=n_{sa}+j_{sa}-j_i-k_3} \frac{(n_i + 2 \cdot j_{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - k_1 - k_2)!}{(n_i - n - k_1 - k_2)!} \cdot \frac{1}{(n + 2 \cdot j_{sa} + j_{sa}^s + j_{sa}^{ik} - j_{ik} - s - 2 \cdot j_{sa})!} \cdot \frac{(l_s - k_1 - k_2)!}{(l_s - j_s - k_1 - k_2 + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_j)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + k \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{ik} - 1 \leq j_{ik} \leq j_{sa}^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - j_{sa}^{sa} \wedge j_{sa}^{sa} + j_{sa} - j_{sa} \leq j_i \leq n \wedge$$

$$l_i - j_{sa}^{ik} + j_{sa} = l_s \wedge l_s + j_{sa}^{ik} - j_{sa} = l_i \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge l_s > D - n + k > 0) \wedge$$

$$s: \{j_{sa}^{sa}, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge l_s > D - n + k > 0 \wedge$$

$$s: \{j_{sa}^{sa}, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge l_s > D - n + k > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \vee$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa}}^{l_s+j_{sa}^{ik}-k} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa} - k_1 - k_2)!}{(n_i - n - k_1 - k_2)!}$$

$$\frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa} - k_1 - k_2)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_s)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - j_s \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} - j_{sa}^{ik} \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} - k_1 + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

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$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_i+j_{sa}^{ik}-k-s+1} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + 2 \cdot j_{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)!}$$

$$\frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - l_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\}$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

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$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$f_z^{DSD} S_{j_s, j_{ik}, j_{sa}}^{DSD} = \sum_{k=1}^{D-1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$l_{sa}^{ik-k-j_{sa}} \sum_{j_{ik}=\dots+n-D}^{()}\sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()}\sum_{j_i=j_{sa}^s+j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-\mathbb{k}_2)}^{()}\sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + 2 \cdot j_{sa}^s + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)!}$$

$$\frac{1}{(n + 2 \cdot j_{sa}^s + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \binom{D-n+1}{j_s=j_{ik}+k+1}$$

$$\sum_{j_{ik}=l_s+j_{sa}-k}^{l_s+j_{sa}-k} \binom{l_s+j_{sa}-k}{j_{ik}+n-D} \sum_{j_{sa}=j_{sa}}^{j_{sa}+j_{sa}-j_{sa}} \binom{j_{sa}+j_{sa}-j_{sa}}{s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \binom{n_i-j_s+1}{n_i=n+\mathbb{k}} \sum_{n_{ik}=n_i+j_s-j_{ik}-\mathbb{k}_1}^{(n_i-j_s+1)}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}^{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}^{(n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3)}$$

$$\frac{(n_i + 2 \cdot j_{sa}^s + j_{sa}^s + j_{sa}^s - j_s - j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)!}$$

1

$$\frac{1}{(n + 2 \cdot j_{sa}^s + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$

$$fz^{SDSD}_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=l_s+n+j_{sa}^{ik}-D-1}^{l_i+j_{sa}^{ik}-k-s+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_i+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=j_i-k-1}^{()}$$

$$\sum_{(n_{sa}=n_{ik}-j_s)}^{()} \sum_{n_s=n_{ik}-j_i-k_3}^{()}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_{ik} - s - 2 \cdot j_{sa} - k_2)!}{(n_i - n_{ik} - k_1 - k_2)!}$$

$$\frac{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!}{(l_s - k - 1)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D > n < n \wedge I = \mathbb{k} > D - n + 1 \wedge$

$2 \leq j_i \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_{ik} + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 \leq l_i \wedge l_i + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$(n \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 7 \wedge \mathbf{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_1, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=l_s+n+j_{sa}^{ik}-D-1}^{l_{sa}+j_{sa}^{ik}-k-j_{sa}+1} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{i_s}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{i_s}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_2}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)!}$$

$$\frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(-k-1)!}{(l_s - j_s - \dots + 1)! \cdot (j_s - \dots)}$$

$$\frac{(D - \dots)}{(D - j_i - n - \dots)(n - j_i)!}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} - j^{sa} + j_{sa}^{ik} - j_s \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + \dots - s \wedge j_s + s - j_s \leq j_i \leq \dots \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa} - j_{sa} = l_{ik} \wedge \dots + j_{sa} - s = l_{sa} \wedge$

$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 7 \wedge s = s + \dots \wedge$

$\mathbb{k}_z: z \geq 3 \wedge \mathbb{k} = \mathbb{k}_1 + \dots + \mathbb{k}_3) \vee$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + \mathbb{k} \wedge$

$(\mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + \mathbb{k} \wedge$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\}$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \vee$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=l_s+n+j_{sa}^{ik}-D-1}^{l_{ik}-k+1} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j_{sa}-j_i-k_3}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)!}$$

$$\frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3 \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3 \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$\sum_{k=1}^{D-n+1} \sum_{(j_s=l_i+n-D-s+1)}^{(l_i-k-s+2)}$$

$$\sum_{j_s+j_{sa}^{ik}-1}^{()} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j_{sa}^s+j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + 2 \cdot j_{sa}^s + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)!}$$

$$\frac{1}{(n + 2 \cdot j_{sa}^s + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq \mathbf{n} < \mathbf{n} \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$fz_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D-1} \frac{(l_{sa}-k-1)!}{(j_s-k-1)! \cdot (n-D-j_{sa}+1)!} \cdot \sum_{j_{ik}=j_s+j_{sa}^{ik}}^{(n_{is}+1)} \sum_{j_{sa}=j_{ik}-j_{sa}^{ik}}^{(n_{is}+1)} \sum_{j_i=j_{sa}+s-j_{sa}}^{(n_{is}+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(n_{is}+1)} \sum_{n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}^{(n_{is}+1)} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}^{(n_{is}+1)} \frac{(n_i+2 \cdot j_{sa}+j_{sa}^{ik}-j_s-j_{ik}-s-2 \cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2)!}{(n_i-n-\mathbb{k}_1-\mathbb{k}_2)!} \cdot \frac{1}{(n+2 \cdot j_{sa}+j_{sa}^s+j_{sa}^{ik}-j_s-j_{ik}-s-2 \cdot j_{sa})!} \cdot \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!}$$

$$D \geq \mathbf{n} < \mathbf{n} \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = \mathbf{s} + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$f_z^{DSD} S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik})}^{(l_{ik}-k-j_{sa}^{ik}+2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j_s+j_{sa}-j_{sa}^{ik}}^{(n_i-j_s+1)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+j_{sa}^{ik})}^{(n_i-j_s+1)} \sum_{(j_{ik}=n_{is}+j_s-j_{sa}^{ik})}^{(n_i-j_s+1)}$$

$$\sum_{(n_s=n_{ik}+j_{ik}-j_{sa}^{ik}-\mathbb{k}_2)}^{(n_s=n_{sa}+j_s-j_{sa}^{ik}-j_i-\mathbb{k}_3)}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^{ik} - j_s - j_{sa}^{ik} - j_i - s - j_{sa} - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)!}$$

$$\frac{(n + j^{sa} + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!}{(l_s - k - 1)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > n + 1$$

$$2 \leq j_s \leq j_{sa} - j_{sa}^{ik} + 1, j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} - 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n) \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge \mathbf{s} = \mathbf{s} + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3)) \Rightarrow$$

$$f_z^{S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD}} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{lk}-1} \sum_{\binom{()}{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{lk}}} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+lk}^n \sum_{\binom{()}{n_{is}=n+lk-j_s+1}}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{\binom{()}{n_{sa}=n_{ik}+j_{ik}-j_{sa}-lk_2}}^{()}} \sum_{n_s=n_{sa}+j_{sa}-j_i-lk_3}$$

$$\frac{(n_i + 2 \cdot j_{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - lk_1 - lk_2)!}{(n_i - n - lk_1 - lk_2)!}$$

$$\frac{1}{(n + 2 \cdot j_{sa} + j_{sa}^s + j_{sa}^{ik} - j_i - j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(l_s - k)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + lk \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{lk} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{lk} \leq j_{sa} \leq j_i + j_{sa} - j_{sa} + j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_i - j_{sa}^{lk} + j_{sa} = l_s \wedge l_s + j_{sa}^{ik} - j_{sa} = l_i \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge l_s > 0) \wedge k > 0)$$

$$s: \{j_{sa}^{lk}, lk_1, j_{sa}^{ik}, lk_2, j_{sa}, \dots, lk_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + lk \wedge$$

$$lk_1 = lk \wedge lk = lk_1 + lk_2 + lk_3) \vee$$

$$(D \geq n < n \wedge l_s = lk > 0 \wedge$$

$$s: \{j_{sa}^{lk}, j_{sa}^{ik}, lk_2, j_{sa}, \dots, lk_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + lk \wedge$$

$$lk_2: z = 2 \wedge lk = lk_2 + lk_3) \vee$$

$$(D \geq n < n \wedge l_s = lk > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \vee$$

$$fz S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{sa-k}-j_{sa}+2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3} (n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa} - k_1 - k_2)! / (n_i - n - k_1 - k_2)! \cdot \frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - l_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - j_s \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} - j_{sa}^{ik} \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} - k_1 + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + 2 \cdot j_{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)!}$$

$$\frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - l_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\}$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

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$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$\sum_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} \sum_{k=1}^{D-n} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)}$$

$$\sum_{j_{ik}+j_{sa}^{ik}-1}^{()} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j_{sa}^{ik}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)!}$$

$$\frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_k^{D-n+1} \sum_{(j_s=l_{sa}+n-k+1)}^{(l_i-k-2)} \sum_{j_{ik}=j_{sa}-1}^{(j_{sa}-j_{ik}+j_{sa}-j_{sa}+s-j_{sa})} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n_{is}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3)} \frac{(n_i + 2 \cdot j_{sa}^s + j_{sa}^s + j_{sa}^s - j_s - j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2)!}{(n - \mathbb{k}_1 - \mathbb{k}_2)!} \cdot \frac{1}{(n_i + 2 \cdot j_{sa}^s + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \geq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$

$$f_z^{DSD} S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{()} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n-k-k_1}^{(n_i-j_s+1)}$$

$$\sum_{(n_{sa}=n_{ik}-k_1-k_2)}^{()} \sum_{n_s=n_i+j_{sa}-j_i-k_3}^{()}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_{ik} - s - 2 \cdot j_{sa} - k_2)!}{(n_i - n - k_1 - k_2)!}$$

$$\frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D > n < n \wedge I = \mathbb{k} > D - n + 1 \wedge$

$2 \leq i \leq j_{ik} - j_{sa}^{ik} - 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa}^{ik} - j_{sa}^{ik} \leq j^{sa} \leq j_{ik} + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 \leq l_i \wedge l_i + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$((n_i \geq n - n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 7 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

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$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_1, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \Rightarrow$$

$$f_z^{DSD} S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{sa+n-D-j_{sa}+1})}^{(l_s-k+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{i_s}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{i_s}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_2}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)!}$$

$$\frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(-k-1)!}{(l_s - j_s - \dots + 1)! \cdot (j_s - 2 \dots)}$$

$$\frac{(D - \dots)}{(D - j_i - n - \dots - n - j_i)!}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} - j^{sa} + j_{sa}^{ik} - j_s \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + \dots - s \wedge j_s + s - j_s \leq j_i \leq \dots \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa} - j_{sa} = l_{ik} \wedge \dots + j_{sa} - s = l_{sa} \wedge$

$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 7 \wedge s = s + \dots \wedge$

$\mathbb{k}_2: 2 \dots 3 \wedge \mathbb{k} = \mathbb{k}_1 + \dots + \mathbb{k}_3) \vee$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = \dots + \mathbb{k} \wedge$

$(\mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}^i, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + \mathbb{k} \wedge$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\}$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \vee$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_i-k-s+2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j_{sa}-j_i-k_3}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)!}$$

$$\frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$\sum_{k=1}^{n+1} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_{sa}-k-j_{sa}+2)}$$

$$\sum_{j_s=j_s+j_{sa}^{ik}-1}^{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j_{sa}+s-j_{sa}}^{()}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)!}$$

$$\frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z^{S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD}} = \sum_{k=1}^{D-1} \sum_{l_s=0}^{(j_s - k - 1)} \sum_{j_{ik}=j_s + j_{sa}^{ik}}^{(n_{is} = n_{is} + j_s + 1)} \sum_{j_i=j_{sa} + s - j_{sa}}^{(n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1)} \sum_{n_{sa}=n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2}^{(n_i + 2 \cdot j_{sa} + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2)} \sum_{n_s=n_{sa} + j_{sa} - j_i - \mathbb{k}_3}^{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)} \frac{1}{(n + 2 \cdot j_{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_i-k-s+2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{()} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=l_s+n-s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})} \sum_{(n_{is}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)} \sum_{(n_s=n_{sa}-j_i-\mathbb{k}_3)}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - j_{sa} - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)!}$$

$$\frac{(n_i + j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!}{(l_s - k - 1)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > n - n +$$

$$2 \leq j_s - j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_{ik} + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_i - j_{sa}^{ik} - 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n) \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3)) \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_{sa}-k-j_{sa}+2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{lk}-1} \sum_{\binom{()}{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{lk}}} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+lk}^n \sum_{\binom{()}{n_{is}=n+lk-j_s+1}}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{\binom{()}{n_{sa}=n_{ik}+j_{ik}-j_{sa}-lk_2}}^{(n_i-j_s+1)} \sum_{n_s=n_{sa}+j_{sa}-j_i-lk_3}$$

$$\frac{(n_i + 2 \cdot j_{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - lk_1 - lk_2)!}{(n_i - n - lk_1 - lk_2)!}$$

$$\frac{1}{(n + 2 \cdot j_{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(l_s - k)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + lk \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{lk} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{lk} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{lk} \leq j_{sa} \leq j_i + j_{sa} - j_{sa} \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_i - j_{sa}^{lk} + lk = l_s \wedge l_s + j_{sa}^{ik} - j_{sa} = l_i \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge l_s > D - n + lk > 0) \wedge$$

$$s: \{j_{sa}^{lk}, lk_1, j_{sa}^{ik}, lk_2, j_{sa}, \dots, lk_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + lk \wedge$$

$$lk_1 = lk \wedge lk = lk_1 + lk_2 + lk_3) \vee$$

$$(D \geq n < n \wedge l_s = lk > 0 \wedge$$

$$s: \{j_{sa}^{lk}, j_{sa}^{ik}, lk_2, j_{sa}, \dots, lk_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + lk \wedge$$

$$lk_2: z = 2 \wedge lk = lk_2 + lk_3) \vee$$

$$(D \geq n < n \wedge l_s = lk > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \vee$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_{ik}-k-j_{sa}^{ik}+2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3} (n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa} - k_1 - k_2)! / (n_i - n - k_1 - k_2)! \cdot \frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_s)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - j_s \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} + j_{sa} - s > l_{sa} \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - j_s \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} + j_{sa} - s > l_{sa} \wedge$$

$$(D + s - n < l_i \wedge D + l_s - n - 1 \leq l_i) \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_s, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_s, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \vee$$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i}^{DSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()} \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{()} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{()} \sum_{j_i=l_i+n-D}^{l_{sa}+s-k-j_{sa}+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3} (n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa} - k_1 - k_2)! \cdot \frac{1}{(n_i - n - k_1 - k_2)!} \cdot \frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_s)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_s \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D > n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$j_{sa}^{DSD}, j_{ik}, j_{sa}^i, j_i = \sum_{k=1}^{D+l_s+s-i} \binom{()}{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=\dots+j_{sa}^{ik}-j_{sa}} \binom{()}{(j^{sa}=j_i+j_{sa}-s)} \sum_{j_i=l_i+n-D}^{l_{ik}+s-k-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)} \binom{()}{(n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3)}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)!}$$

$$\frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

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$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = \mathbf{s} + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = \mathbf{s} + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = \mathbf{s} + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = \mathbf{s} + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = \mathbf{s} + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \dots) \Rightarrow$$

$$fz S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()} \sum_{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}^{()} \sum_{(j_{sa}=j_i+j_{sa}-s)}^{()} \sum_{j_i=l_i+n-D}^{l_s+s-k} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3} (n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa} - k_1 - k_2)! / (n_i - n - k_1 - k_2)! \cdot \frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (i_s - 2)!} \cdot \frac{(D - l_s)!}{(D + j_i - n - l_i)! \cdot (n - i_i)!}$$

$((D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - j_s \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} - j_i + j_{sa} - s > l_{sa}) \vee$

$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - j_s \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} - j_i + j_{sa} - s > l_{sa} \wedge$

$(D + s - n < l_i \wedge (D + l_s - n - s > n - i_i)) \wedge$

$((D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_s, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 5 \wedge s = s + k \wedge$

$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_s, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k \wedge$

$k_z: z = 2 \wedge k = k_2 + k_3) \vee$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

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$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \vee$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}^{(l_{sa}-k+1)} \sum_{(j_{sa}=l_i+n+j_{sa}-D-s)}^{()} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_i=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3} (n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa} - k_1 - k_2)! \cdot \frac{1}{(n_i - n - k_1 - k_2)!} \cdot \frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_s - 1)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge (l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge (l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge (l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge (l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_s \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\}$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

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$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$j_{sa}^{DSD} j_{ik} j_{sa} j_i = \sum_{k=1}^{D+l_s+s-j_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=j_{sa}^{ik}-j_i-j_{sa}}^{j_{sa}-k-j_{sa}^{ik}+1} \sum_{(j_{sa}=l_i+n+j_{sa}-D-s)} \sum_{j_i=j_{sa}^{ik}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j_{sa}^{ik}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + 2 \cdot j_{sa}^{ik} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)!}$$

$$\frac{1}{(n + 2 \cdot j_{sa}^{ik} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

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$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

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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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$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

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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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$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

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$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \wedge$$

$$((D \geq n < n \wedge I = \mathbb{K} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{K}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{K} \wedge$$

$$\mathbb{K}_z: z = 3 \wedge \mathbb{K} = \mathbb{K}_1 + \mathbb{K}_2 + \mathbb{K}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{K} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{K}_2, j_{sa}, \dots, \mathbb{K}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{K} \wedge$$

$$\mathbb{K}_z: z = 2 \wedge \mathbb{K} = \mathbb{K}_2 + \mathbb{K}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{K} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{K}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{K}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \dots) \Rightarrow$$

$$fz S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=j_{sa}+j_{sa}^{lk}-j_{sa}} \sum_{(j_{sa}=l_i+n+j_{sa}-D-s)}^{(l_s+j_{sa}-k)} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3} (n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa} - k_1 - k_2)! / (n_i - n - k_1 - k_2)! \cdot \frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - l_i)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - j_s \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} + j_{sa} - s > l_{sa} \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - j_s \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} + j_{sa} - s > l_{sa} \wedge$$

$$(D + s - n < l_i \wedge (D + l_s - n - 1)) \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_s, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_s, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \vee$$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i}^{DSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_{sa}+j_{sa}^{ik}-k-j_{sa}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{i_s}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{i_s}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{(\)} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_2}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa} - k_1 - k_2)!}{(n_i - n - k_1 - k_2)!}$$

$$\frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(l_s - j_s - k_1 - k_2)! \cdot (j_s - k_1)!}{(D - n - k_1 - k_2)!}$$

$$\frac{(D - n - k_1 - k_2)!}{(D - n - k_1 - k_2)! \cdot (n - j_i)!}$$

- $(D \geq n < n \wedge l_s > D - n + 1 \wedge$
- $2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$
- $j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$
- $l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$
- $(D \geq n < n \wedge l_s = D - n + 1 \wedge$
- $2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$
- $j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$
- $l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$
- $(D \geq n < n \wedge l_s > D - n + 1 \wedge$
- $2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$
- $j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$
- $l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$
- $(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$
- $1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$
- $j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = (\mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = (\mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = \mathbf{s} + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = \mathbf{s} + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = \mathbf{s} + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = \mathbf{s} + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z \mathcal{S}_{j_{ik}, j_{sa}, j_i} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_{ik}-k+1} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + 2 \cdot j_{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2)!}$$

$$\frac{1}{(\mathbf{n} + 2 \cdot j_{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

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$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

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$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

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$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

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$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0) \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$(\mathbb{k}_2 \leq s \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\}$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-k} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{i_s}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{i_s}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_2}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)!}$$

$$\frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(l_s - j_s - \mathbb{k}_1 - 1)! \cdot (j_s - \mathbb{k}_2)!}{(D - n - \mathbb{k}_1 - \mathbb{k}_2 - 1)!}$$

$$\frac{(D - n - \mathbb{k}_1 - \mathbb{k}_2 - 1)!}{(D - n - \mathbb{k}_1 - \mathbb{k}_2 - 1)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} - j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j_{sa}^{ik} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s < D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} - j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j_{sa}^{ik} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$(D + s - n - l_i \leq D + j_{sa} - s - n - 1)) \wedge$$

$$((D \geq n < n \wedge l_s - \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$j_{sa}^{ik} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge l_s - \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_1, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \Rightarrow$$

$$f_z^{SDSD} j_s, j_{ik}, j_{sa}, j_i = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{sa}-k-j_{sa}+2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{i_s}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{i_s}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_2}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa} - k_1 - k_2)!}{(n_i - n - k_1 - k_2)!}$$

$$\frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(l_s - j_s - k_1 - k_2)! \cdot (j_s - k_1 - k_2)!}{(D - n - k_1 - k_2)!}$$

$$\frac{(D - n - k_1 - k_2)!}{(D - n - k_1 - k_2)!}$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = (k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = (k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$f_z S_{j_s}^{DS} j_{sa}, j_i = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)!}$$

$$\frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

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$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

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$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0) \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$(\mathbb{k}_2 \leq s \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\}$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{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 + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)!} \cdot \frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!} \cdot \frac{(l_s - j_s - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (j_s - \mathbb{k}_2)!}{(D - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} - j^{sa} + j_{sa}^{ik} - j_s) \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j_{sa}^{ik} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s < D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} - j^{sa} + j_{sa}^{ik} - j_s) \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j_{sa}^{ik} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$(D + j_{sa} - s < l_{sa} \leq D - (l_s + j_{sa} - n - 1)) \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$j_{sa}^{ik} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_1, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j_{sa}=j_i+j_{sa}-s)}^{()} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{ik}+s-k-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{i_s}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{i_s}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_2}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa} - k_1 - k_2)!}{(n_i - n - k_1 - k_2)!}$$

$$\frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(l_s - j_s - k_1 - k_2)! \cdot (j_s - k_1)!}{(D - n - k_1 - k_2)!}$$

$$\frac{(D - n - k_1 - k_2)!}{(D - n - k_1 - k_2)! \cdot (n - j_i)!}$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s = D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

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$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

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$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = (\mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = (\mathbb{k}_2 + \mathbb{k}_3) \vee$$

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$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

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$$(D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

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$$s \geq 5 \wedge \mathbf{s} = \mathbf{s} + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

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$$s \geq 5 \wedge \mathbf{s} = \mathbf{s} + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

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$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_{zS} \mathcal{P}_{j_{ik}, j_{sa}, j_i} = \sum_{k=1}^{D+l_s+s-n-l_i} \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-k}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(\)} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + 2 \cdot j_{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2)!}$$

$$\frac{1}{(\mathbf{n} + 2 \cdot j_{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

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$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

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$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = \mathbf{s} + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

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$$f_z \mathcal{S}_{j_{ik}, j_{sa}, j_i} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\)}$$

$$\sum_{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}^{(l_{ik}+j_{sa}-k-j_{sa}^{ik}+1)} \sum_{(j_{sa}=l_{sa}+n-D)} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(\)} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2)!}$$

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$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{j_s=1}^{D+l_s+s-n-l_i} \sum_{j_{ik}=j_s-j_{sa}^{ik}-j_{sa}}^{(l_s+j_{sa}-j_{ik}-j_{sa})} \sum_{j_{sa}=l_{sa}+n}^{(n+l_s-j_s+1)} \sum_{j_i=n+\mathbb{k}}^n \sum_{(n_{is}=n_{is}+j_s+1)} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)} \sum_{(n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3)}$$

$$\frac{(n_i + 2 \cdot j_{sa}^s + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)!}$$

$$\frac{1}{(n_i + 2 \cdot j_{sa}^s + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!}$$

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$$fz S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{j_s=1}^{D+l_s+s-n-l_i} \binom{D+l_s+s-n-l_i}{j_s=j_{ik}+1} \sum_{j_{ik}=l_{sa}+n+j_{sa}^i-j_{sa}}^{l_{ik}-k+1} \binom{l_{ik}-k+1}{j_{ik}=l_{sa}+n+j_{sa}^i-j_{sa}} \sum_{n_{ik}=n+l_{sa}+j_{sa}^i-j_{sa}}^{n} \binom{n}{n_{ik}=n+l_{sa}+j_{sa}^i-j_{sa}} \sum_{n_s=n_{sa}+j_{sa}^i-j_{sa}}^{n_{ik}-j_{sa}+1} \binom{n_{ik}-j_{sa}+1}{n_s=n_{sa}+j_{sa}^i-j_{sa}} \sum_{n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}^{n_s} \binom{n_{ik}-j_{sa}+1}{n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \frac{(n_i+2 \cdot j_{sa}^i+j_{sa}^s+j_{sa}^i-j_s-j_{ik}-s-2 \cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2)!}{(n_i-n-\mathbb{k}_1-\mathbb{k}_2)!} \frac{1}{(n+2 \cdot j_{sa}^i+j_{sa}^s+j_{sa}^i-j_s-j_{ik}-s-2 \cdot j_{sa})!} \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!}$$

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$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$(n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^l\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa}}^{l_s+j_{sa}^{ik}-k} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-k_2)}^{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-k_2)} \sum_{n_s=n_{sa}+j_{sa}-j_i-k_3}$$

$$\frac{(n_i + 2 \cdot j_{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot k_1 - k_2)!}{(n_i - n - k_1 - k_2)!}$$

$$\frac{1}{(n + 2 \cdot j_{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(l_s - k_1 - k_2)!}{(l_s - j_s - k_1 - k_2 + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1) \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_i - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D > n < n \wedge l_s = D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_i - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$(D + j_{sa} - 1 < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$((D \geq n < n \wedge l = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

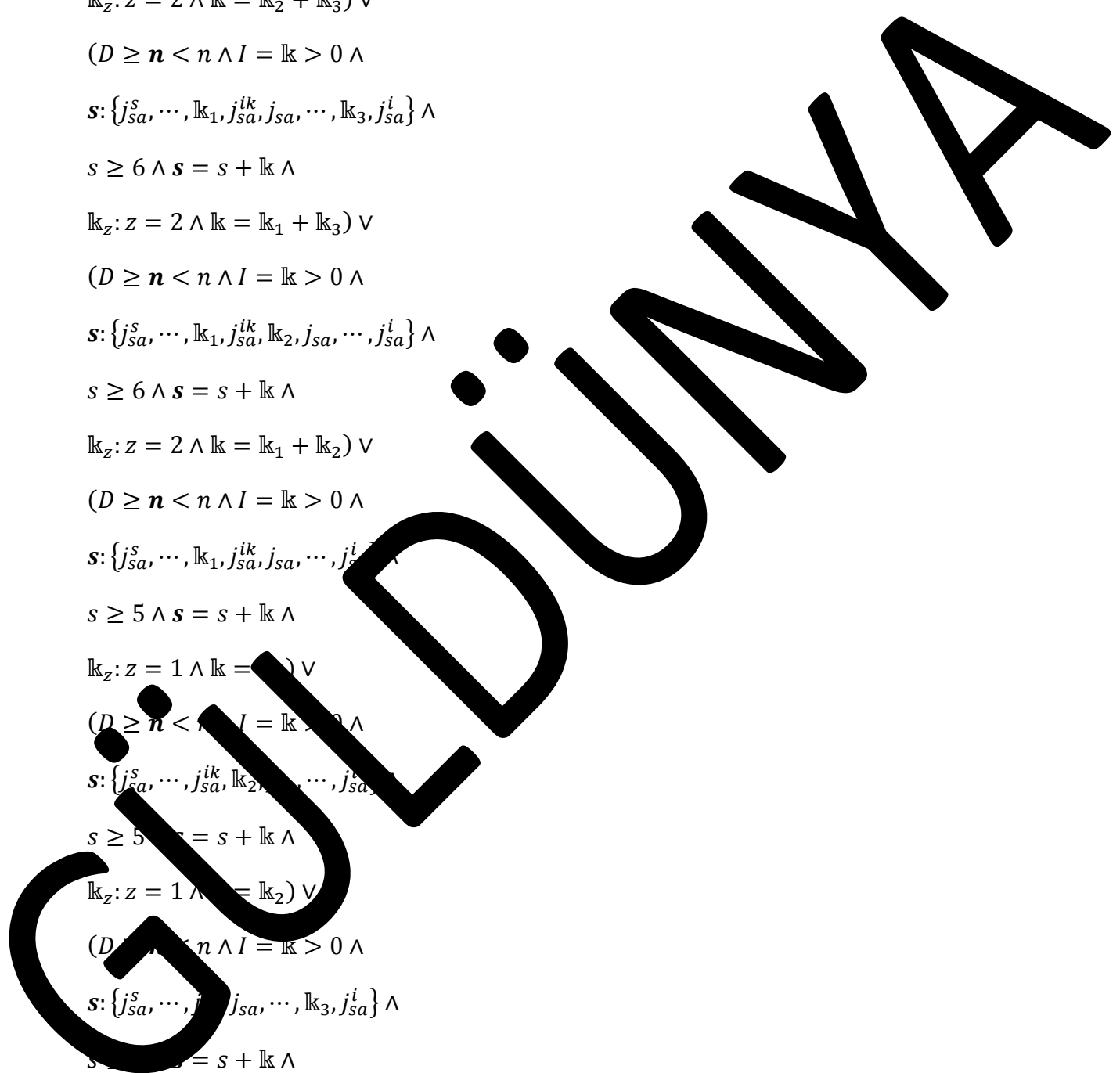
$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)}$$



$$\begin{aligned}
 & \sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{\binom{()}{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}} \sum_{j_i=j^{sa}+s-j_{sa}} \\
 & \sum_{n_i=n+k}^n \sum_{\binom{()}{n_{is}=n+k-j_s+1}} \sum_{n_{ik}=n_{is}+j_s-j_{ik}} \\
 & \sum_{\binom{()}{n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2}} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3} \\
 & \frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - k_1 - k_2 - k_3)!}{(n_i - n - k_1 - k_2 - k_3)!} \\
 & \frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_i - j_{ik} - s - 2 \cdot j_{sa})!} \\
 & \frac{(l_s - k_1 - k_2 - k_3)!}{(l_s - j_s - k_1 - k_2 - k_3)! \cdot (j_s - 2)!} \\
 & \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

$$\begin{aligned}
 & ((D \geq n < n \wedge l_s > D - n + 1 \wedge \\
 & 2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\
 & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge \\
 & l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee \\
 & (D \geq n < n \wedge l_s \leq D - n + 1 \wedge \\
 & 2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\
 & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge \\
 & l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee \\
 & (D \geq n < n \wedge l_s > D - n + 1 \wedge \\
 & 2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\
 & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge \\
 & l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee \\
 & (D \geq n < n \wedge l_s \leq D - n + 1 \wedge \\
 & 2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\
 & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge \\
 & l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee \\
 & (D \geq n < n \wedge l_s \leq D - n + 1 \wedge
 \end{aligned}$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D < n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \dots) \Rightarrow$$

$$S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_s-k-1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{lk}-1} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{lk})}^{(\quad)} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(\quad)} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + 2 \cdot j_{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)!}$$

$$\frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - l_i)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_{sa} - j_{sa}^{ik} - n) \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\}) \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \dots) \Rightarrow$$

$$fz \mathcal{S}_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j_{sa}=j_i+j_{sa}-s)}^{()} \sum_{j_i=l_{ik}+s+n-D-j_{sa}^{ik}}^{l_s+s-k}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + 2 \cdot j_{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)!}$$

$$\frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - l_i)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge 2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n - 1 \wedge l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge 1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \wedge (D + j_{sa}^{ik} - n < l_{ik} \leq D + l_{sa}^{ik} - n) \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge s \geq 7 \wedge s = s + \mathbb{k} \wedge \mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \wedge$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge s: \{j_{sa}^s, \dots, j_{sa}^e, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge s \geq 5 \wedge s = s + \mathbb{k} \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge s \geq 6 \wedge s = s + \mathbb{k} \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \dots) \Rightarrow$$

$$f_z \mathcal{S}_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j_{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik})}^{(l_s+j_{sa}-k)} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + 2 \cdot j_{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)!}$$

$$\frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - l_i)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_{sa}^{ik} - n) \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\}) \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\}) \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\}) \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \dots) \Rightarrow$$

$$fz \mathcal{S}_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_s+j_{sa}^{ik}-k} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j_{sa}^{ik}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + 2 \cdot j_{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)!}$$

$$\frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - l_i)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_{sa} - j_{sa}^{ik} - n) \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\}) \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \dots) \Rightarrow$$

$$S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_s-k+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + 2 \cdot j_{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)!}$$

$$\frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - l_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\}) \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\}) \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\}) \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\}) \wedge$$

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$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \Rightarrow$$

$$f_z^{DSD} S_{j_s, j_{ik}, j_{sa}}^{DSD} = \sum_{k=1}^{D-1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()}$$

$$= \sum_{j_s=j_{sa}+l_{ik}-l_{sa}}^{()} \sum_{(j_{sa}=j_i+l_{sa}-l_i)}^{()} \sum_{j_i=l_i+n-D}^{l_i-k+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_i=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j_{sa}-j_i-k_3}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa} - k_1 - k_2)!}{(n_i - n - k_1 - k_2)!}$$

$$\frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}+l_{ik})} \sum_{(j_s=s-k-j_{sa}+1)} \sum_{(j_{ik}=n+l_{ik}-l_{sa})} \sum_{(j_{sa}=l_{sa}-l_{ik})} \sum_{(j_i=D-j_{sa})} \sum_{n_i=n+k}^n \sum_{(n_{is}=n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}^{(n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3)} \frac{(n_i+2 \cdot j_{sa}+j_{sa}+j_{sa}^s+j_{sa}^{ik}-j_s-j_{ik}-s-2 \cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2)!}{(n_i-n-\mathbb{k}_1-\mathbb{k}_2)!} \cdot \frac{1}{(n_i+2 \cdot j_{sa}+j_{sa}^s+j_{sa}^{ik}-j_s-j_{ik}-s-2 \cdot j_{sa})!} \cdot \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$l_s - j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz_{J_s, j_{ik}, j^{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\cdot)} \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{(\cdot)} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{(\cdot)} \sum_{j_i=l_{ik}+n+s-D-j_{sa}^{ik}+1}^{l_{ik}+s-k-j_{sa}^{ik}+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}-j_s-\mathbb{k}_1}^{(n_i-j_s+1)} \sum_{(n_{sa}=n_{ik}-\mathbb{k}_2)}^{(\cdot)} \sum_{n_s=n+\mathbb{k}-j_s-j_i-\mathbb{k}_3}^{(\cdot)} \frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa} - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)!} \frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!} \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa}^{ik} \leq j^{sa} \leq j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 \leq l_s \wedge l_s + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((n \geq n) \wedge n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 1 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_1, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \Rightarrow$$

$$fz_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()}$$

$$\sum_{j_{ik}=j_{sa}+l_{ik}-l_{sa}} \sum_{(j_{sa}=j_i+l_{sa}-l_i)}^{()} \sum_{j_i=l_s+n+s-D-1}^{l_s+s-k}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_2} \frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa} - k_1 - k_2)!}{(n_i - n - k_1 - k_2)!} \cdot \frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!} \cdot \frac{(l_s - j_s - k_1 - 1)! \cdot (j_s - 2)!}{(D - n - k_1 - k_2 - n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} - j^{sa} + j_{sa}^{ik} - j_s \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j_s + s - j_s \leq j_i \leq j_s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa} - j_{sa} = l_{ik} \wedge l_s + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, l_{sa}, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$(k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

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$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\}$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \vee$$

$$fz_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()}$$

$$\sum_{j_{ik}=j_{sa}+l_{ik}-l_{sa}} \sum_{(j_{sa}=j_i+l_{sa}-l_i)}^{()} \sum_{j_i=l_i+n-D}^{l_{sa}+s-k-j_{sa}+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)!}$$

$$\frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3 \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

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$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$j_{sa}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()}$$

$$\sum_{(j_{sa}^{sa+l_{ik}-l_{sa}})}^{()} \sum_{(j_{sa}=j_i+l_{sa}-l_i)}^{()} \sum_{j_i=l_i+n-D}^{l_{ik}+s-k-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j_{sa}^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + 2 \cdot j_{sa}^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)!}$$

$$\frac{1}{(n + 2 \cdot j_{sa}^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

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$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$fz_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=0}^{D-n+1} \sum_{j_s=j_{ik}+l_s-l_{ik}} \sum_{l_s=0}^{l_s+s-k} \sum_{j_{ik}=j_{sa}-l_{sa}-(j_{sa}+l_{sa}-l_i)} \sum_{j_i=l_i+n-D}^{(n-i+1)} \sum_{n_i=0}^n \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3} \frac{(n_i + 2 \cdot j_{sa} + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)!} \cdot \frac{1}{(n + 2 \cdot j_{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$s \geq 5 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}+l_s-l_i)}^{(\cdot)}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{(\cdot)} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{(\cdot)} \sum_{j_i=l_{sa}+l_i-D-j_{sa}}^{l_i-k+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}^{(\cdot)}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)!}$$

$$\frac{(n_i + j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!}{(l_s - k - 1)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > 0 - n + \dots$

$2 \leq j_s - j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_s \leq j^{sa} \leq j_s + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} + j_{sa} - 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$((D \geq n < n) \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^{s-1}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 7 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3)) \Rightarrow$$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}} \sum_{\binom{()}{j^{sa}=j_i+l_{sa}-l_i}} \sum_{l_{ik}+s-k-j_{sa}^{ik}+1}^{j_i+l_{sa}+n+s-D-j_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{\binom{()}{n_{is}=n+k-j_s+1}}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{\binom{()}{n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2}}^{()}} \sum_{n_s=n_{sa}+j_s-j_i-k_3}^{j_i-k_3}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - k_1 - k_2)!}{(n_i - n - k_1 - k_2)!}$$

$$\frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(l_s - k_1 - k_2)!}{(l_s - j_s - k_1 - k_2 + 1)! \cdot (j_s - 2)!}$$

$$\frac{(n - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > D - n + k_1$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - j_{sa}^{ik} \wedge j^{sa} + j_{sa} - j_{sa} \leq j_i \leq n \wedge$

$l_i - j_{sa}^{ik} + j_{sa} = l_s \wedge l_s + j_{sa} - j_{sa} = l_i \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$((D \geq n < n \wedge I = k > 0) \vee$

$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, k_2, j_s, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 7 \wedge s = s + k \wedge$

$k_z: z = 2 \wedge k = k_1 + k_2 + k_3) \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, k_2, j_s, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k \wedge$

$k_z: z = 2 \wedge k = k_2 + k_3) \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \vee$$

$$fz_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()}$$

$$\sum_{j_{ik}=j_{sa}+l_{ik}-l_{sa}} \sum_{(j_{sa}=j_i+l_{sa}-l_i)}^{()} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_s+s-k}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa-k_2})}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa} - k_1 - k_2)!}{(n_i - n - k_1 - k_2)!}$$

$$\frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa} - k_1 - k_2)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_s)!}{(D + j_i - n - l_i)! \cdot (n - l_i)!}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - j_s \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} - j_{sa}^{ik} \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} - k_1 + j_{sa} - s = l_{sa} \wedge$

$((D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 7 \wedge s = s + k \wedge$

$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k \wedge$

$k_z: z = 2 \wedge k = k_1 + k_3) \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k \wedge$

$k_z: z = 2 \wedge k = k_1 + k_3) \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()}$$

$$\sum_{j_{ik}=j_{sa}+l_{ik}-l_{sa}} \sum_{(j_{sa}=j_i+l_{sa}-l_i)}^{()} \sum_{j_i=l_{ik}+n+s-D-j_{sa}^{ik}}^{l_i-k+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + 2 \cdot j_{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)!}$$

$$\frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - l_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\}$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$f_z^{DSD} S_{j_s, j_{ik}, j_{sa}}^{DSD} = \sum_{k=1}^{D-1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()}$$

$$\sum_{j_{ik}=j_{sa}^{ik}-l_{sa}}^{()} \sum_{(j_{sa}=j_i+l_{sa}-l_i)}^{l_{sa}+s-k-j_{sa}+1} \sum_{(j_i=l_{ik}+n+s-D-j_{sa}^{ik})}^{()}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{()}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j_{sa}^{ik}-j_i-\mathbb{k}_3}^{()}$$

$$\frac{(n_i + 2 \cdot j_{sa}^{ik} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2)!}$$

$$\frac{1}{(\mathbf{n} + 2 \cdot j_{sa}^{ik} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \binom{D-n+1}{j_s=j_{ik}+l_{ik}}$$

$$\sum_{j_{ik}=j_{sa}+l_{sa}-l_{sa}} \binom{l_s+s-k}{j_{sa}+l_{sa}-l_{sa}} \sum_{j_i=D-j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\binom{D-n+1}{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + 2 \cdot j_{sa}^s + j_{sa}^s + j_{sa}^s - j_s - j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)!}$$

$$1$$

$$\frac{1}{(n_i + 2 \cdot j_{sa}^s + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 - j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

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$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

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$$k_z: z = 2 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$f_z^{S^{DSD}}_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\cdot)}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{(\cdot)} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{(\cdot)} \sum_{j_i=l_s+n+s-D}^{l_i-k+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{sa}=n-k_1-j_s+k-k_1)}^{(n_{sa}=n-k_2-j_s+k-k_2)}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} + j_s - j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)!}$$

$$\frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} + j_s - j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n + 1 \wedge I = \mathbb{k} > 0 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} - 1 \wedge j_s + j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + j_{sa} - s = l_s \wedge l_{sa} - j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n + 1 \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 1 \wedge S = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n + 1 \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_1, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \Rightarrow$$

$$f_z^{S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD}} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()}$$

$$\sum_{j_{ik}=j_{sa}+l_{ik}-l_{sa}} \sum_{(j_{sa}=j_i+l_{sa}-l_i)}^{()} \sum_{j_i=l_s+n+s-D-1}^{l_{sa}+s-k-j_{sa}+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_2} \frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa} - k_1 - k_2)!}{(n_i - n - k_1 - k_2)!} \cdot \frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!} \cdot \frac{(l_s - j_s - k_1 - 1)! \cdot (j_s - 2)!}{(D - n - k_1 - k_2 - n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} - j^{sa} + j_{sa}^{ik} - j_s \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j_s + s - j_s \leq j_i \leq j_s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa} - j_{sa} = l_{ik} \wedge l_s + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, l_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

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$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$(k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

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$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

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$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\}$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \vee$$

$$fz_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()}$$

$$\sum_{j_{ik}=j_{sa}+l_{ik}-l_{sa}} \sum_{(j_{sa}=j_i+l_{sa}-l_i)}^{()} \sum_{j_i=l_s+n+s-D-1}^{l_{ik}+s-k-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)!}$$

$$\frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3 \vee$$

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$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

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$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$j_{sa}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()}$$

$$\sum_{(l_i+j_{sa}-k-s+1)}^{()} \sum_{(j_{sa}=l_i+n+j_{sa}-D-s)}^{()} \sum_{(j_i=j_{sa}+l_i-l_{sa})}^{()}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{()}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}^{()}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)!}$$

$$\frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

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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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$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$fz_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=0}^{D-n+1} \sum_{(j_s = j_{ik} + l_s - l_{ik})} \sum_{(l_{sa} = j_{sa} - j_{ik} - k)} \sum_{(j_{ik} = j_{sa} + l_{ik} - l_{sa})} \sum_{(j_i = j_{sa} + l_i - l_{sa})} \sum_{(n_{is} = n + j_s + 1)} \sum_{(n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1)} \sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)} \sum_{(n_s = n_{sa} + j_{sa} - j_i - \mathbb{k}_3)} \frac{(n_i + 2 \cdot j_{sa} + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)!} \cdot \frac{1}{(n + 2 \cdot j_{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

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$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

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$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$s \geq 5 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}+l_s-l_k)}^{(\quad)} \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{(l_{ik}+j_{sa}-k-j_{sa}^{ik}+1)} \sum_{(j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik})} \sum_{j_i=j^{sa}+l_i-l_{sa}} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{j_{ik}=n_{is}+j_s-j_{ik}} \frac{(n_i + 2 \cdot j^{sa} + j_{sa}^{ik} + j_{sa}^{ik} - j_s - j_{ik} - s - j_{sa} - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)!} \frac{(n + j^{sa} + j_{sa}^{ik} + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!}{(l_s - k - 1)!} \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D > n < n \wedge l_s > n + 1$

$2 \leq j_s - j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} + l_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} + j_{sa}^{ik} - 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$((D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 7 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$

$(D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

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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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$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3)) \Rightarrow$$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}} \sum_{(l_s+j_{sa}-k)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j_s-j_i-k_3}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - k_1 - k_2 - k_3)!}{(n_i - n - k_1 - k_2)!}$$

$$\frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(l_s - k_1 - k_2 - k_3)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(n - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > D - n + k$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa} + k = l_s \wedge l_s + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$((D \geq n < n \wedge I = k > 0) \wedge$

$s: \{j_{sa}^{ik}, k_1, j_{sa}^{ik}, k_2, j_{sa}^s, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 7 \wedge s = s + k \wedge$

$k_z: z = 2 \wedge k = k_1 + k_2 + k_3) \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^{ik}, k_1, j_{sa}^{ik}, k_2, j_{sa}^s, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k \wedge$

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$(D \geq n < n \wedge I = k > 0 \wedge$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

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$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

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$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \vee$$

$$fz S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()}$$

$$\sum_{j_{ik}=j_{sa}+l_{ik}-l_{sa}} \sum_{(j_{sa}=l_i+n+j_{sa}-D-s)}^{(l_{sa}-k+1)} \sum_{j_i=j_{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3} (n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa} - k_1 - k_2)! / (n_i - n - k_1 - k_2)! \cdot \frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (i_s - 2)!} \cdot \frac{(D - l_s)!}{(D + j_i - n - l_i)! \cdot (n - i_i)!}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - j_s \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} - j_{sa}^{ik} \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} - k_1 + j_{sa} - s = l_{sa} \wedge$

$((D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 7 \wedge s = s + k \wedge$

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$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k \wedge$

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$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

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$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

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$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()}$$

$$\sum_{j_{ik}=j_{sa}+l_{ik}-l_{sa}} \sum_{(l_{ik}+j_{sa}-k-j_{sa}^{ik}+1)}^{()} \sum_{(j_{sa}=l_i+n+j_{sa}-D-s)} \sum_{j_i=j_{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_i=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j_{sa}-j_i-k_3}$$

$$\frac{(n_i + 2 \cdot j_{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa} - k_1 - k_2)!}{(n_i - n - k_1 - k_2)!}$$

$$\frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - l_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\}$$

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$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

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$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

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$$s \geq 6 \wedge s = s + k \wedge$$

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$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \Rightarrow$$

$$f_z^{DSD} = \sum_{k=1}^{D-1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()}$$

$$\sum_{j_{ik}=j_{sa}^{ik}-l_{sa}}^{(j_{sa}=l_i+n+j_{sa}-D-s)} \sum_{j_i=j_{sa}^{ik}+l_i-l_{sa}}^{(j_{sa}-k)}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j_{sa}-j_i-k_3}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa} - k_1 - k_2)!}{(n_i - n - k_1 - k_2)!}$$

$$\frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}+l_{ik})} \sum_{(l_i+j_{sa}-k-1)} \sum_{(j_{ik}=i+l_{ik}-l_{sa})} \sum_{(a=l_{sa}+n)} \sum_{(i=j_{sa}+l_i-l_{sa})} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n_{is}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3} \frac{(n_i+2 \cdot j_{sa}+j_{sa}^s+j_{sa}^{ik}-j_s-j_{ik}-s-2 \cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2)!}{(n-n-\mathbb{k}_1-\mathbb{k}_2)!} \cdot \frac{1}{(2 \cdot j_{sa}+j_{sa}^s+j_{sa}^{ik}-j_s-j_{ik}-s-2 \cdot j_{sa})!} \cdot \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$l_s - j_{sa} - j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z^{S_{DSD}}_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\cdot)}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{(l_{ik}+j_{sa}-k-j_{sa}^{ik}+1)} \sum_{(j^{sa}=l_{sa}+n-D)} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{(\cdot)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{is}+j_s+l_{ik}-\mathbb{k}_1)}^{(\cdot)}$$

$$\sum_{(n_{sa}=n_{is}-l_{sa}-\mathbb{k}_2)}^{(\cdot)} \sum_{(n_s=n_{is}+j^{sa}-j_i-\mathbb{k}_3)}^{(\cdot)}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)!}$$

$$\frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa}^{ik} \leq j^{sa} \leq j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 \leq l_s \wedge l_s + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((n \geq n) \wedge n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 1 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_1, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3)) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}} \sum_{(l_s+j_{sa}-k)}^{(j^{sa}=l_{sa}+n-D)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{i_s}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{i_s}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_2}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)!}$$

$$\frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(l_s - j_s - \mathbb{k}_1 - 1)! \cdot (j_s - 2 \cdot j_{sa})!}{(D - n - \mathbb{k}_1 - \mathbb{k}_2 - n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} - j^{sa} + j_{sa}^{ik} - j_s \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j_s + s - j_{sa} \leq j_i \leq j_s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa} - j_{sa} = l_{ik} \wedge l_s + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_2: 2 \leq \mathbb{k}_2 \leq 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$(\mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\}$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \vee$$

$$fz S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+l_{ik}-l_{sa}} \sum_{(l_i+j_{sa}-k-s+1)}^{(l_i+j_{sa}-k-s+1)} \sum_{j_i=j_{sa}^{ik}+l_i-l_{sa}} \sum_{(j_{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik})}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j_{sa}^{ik}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)!}$$

$$\frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3 \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3 \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$j_{sa}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()}$$

$$\sum_{j_{sa}^{j_{sa}+l_{sa}-l_{sa}}}^{(l_{sa}-k+1)} \sum_{(j_{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik})} \sum_{j_i=j_{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)!}$$

$$\frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz \overset{DSD}{S} j_s, j_{ik}, j_{sa}, j_i = \sum_{k=0}^{D-n+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})} \sum_{j_{ik}=j_{sa}+l_{ik}-l_{sa}} \sum_{(j_{sa}=j_{ik}+n+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j_{sa}+l_i-l_{sa}} \sum_{n_i=n-\mathbb{k}}^n \sum_{(n_{is}=n-i)} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3} \frac{(n_i + 2 \cdot j_{sa} + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)!} \cdot \frac{1}{(n + 2 \cdot j_{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$s \geq 5 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}+l_s-l_k)}^{()} \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{(l_i+j_{sa}-k-s+1)} \sum_{(j^{sa}=l_s+n+j_{sa}-D-1)} \sum_{j_i=j^{sa}+l_i-l_{sa}} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}} \sum_{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=j_i-\mathbb{k}_3} \frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)!} \cdot \frac{(n_i - 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!}{(l_s - k - 1)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > 2 - n + \dots$

$2 \leq j_s - j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_s \leq j^{sa} \leq j_s + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$((D \geq n < n) \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^{i-1}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 7 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3)) \Rightarrow$$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}} \sum_{(j^{sa}=l_s+n+j_{sa}-D-1)}^{(l_{sa}-k+1)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j_s-j_i-k_3}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - k_1 - k_2)!}{(n_i - n - k_1 - k_2)!}$$

$$\frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(l_s - k_1 - k_2)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(n - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - j_{sa} \wedge j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa} + j_{sa}^{ik} = l_s \wedge l_{ik} + j_{sa}^{ik} - j_{sa} = l_i \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = k > 0)$$

$$s: \{j_{sa}^{ik}, k_1, j_{sa}^{ik}, k_2, j_{sa}^i, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^{ik}, k_1, j_{sa}^{ik}, k_2, j_{sa}^i, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \vee$$

$$fz_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()}$$

$$\sum_{j_{ik}=j_{sa}+l_{ik}-l_{sa}} \sum_{(l_{ik}+j_{sa}-k-j_{sa}^{ik}+1)}^{()} \sum_{(j_{sa}=l_s+n+j_{sa}-D-1)} \sum_{j_i=j_{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3} (n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa} - k_1 - k_2)! \cdot \frac{1}{(n_i - n - k_1 - k_2)!} \cdot \frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (i_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - i_i)!}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} - 1 \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} - k + j_{sa} - s = l_{sa} \wedge$

$((D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 7 \wedge s = s + k \wedge$

$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k \wedge$

$k_z: z = 2 \wedge k = k_1 + k_3) \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k \wedge$

$k_z: z = 2 \wedge k = k_1 + k_3) \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_i+j_{sa}^{ik}-k-s+1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{()} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa} - k_1 - k_2)!}{(n_i - n - k_1 - k_2)!}$$

$$\frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - l_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\}$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$f_z^{DSD} S_{j_s, j_{ik}, j_{sa}}^{DSD} = \sum_{k=1}^{D-1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()}$$

$$\sum_{l_{sa}=l_s-k-j_{sa}}^{()} \sum_{j_{ik}=l_{sa}+n+l_i-D-j_{sa}}^{()} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{()} \sum_{(j_i=j^{sa}+l_i-l_{sa})}^{()}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2)!}$$

$$\frac{1}{(\mathbf{n} + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \binom{D-n+1}{j_s=j_{ik}+l_{ik}}$$

$$\sum_{j_{ik}=n+n-D}^{l_{ik}-k+1} \binom{()}{j_{ik}+l_{sa}} \sum_{j_i=j_{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \binom{(n_i-j_s)}{(n_{is}=n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\binom{()}{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + 2 \cdot j_{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2)!}{(n - n - \mathbb{k}_1 - \mathbb{k}_2)!}$$

$$\frac{1}{(n_i + 2 \cdot j_{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$l_s - j_{sa} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z^{S_{DSD}}_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()} \sum_{j_{ik}=l_s+n+j_{sa}^{ik}-D-1}^{l_s+j_{sa}^{ik}-k} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{()} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{(n_i-j_s+1)} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_{ik}=n+\mathbb{k}-j_s+1)} \sum_{(n_{sa}=n_{ik}-l_{sa})}^{(n_s=n_{ik}+j^{sa}-j_i-\mathbb{k}_3)} \frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_i - j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)!} \cdot \frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} - 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa}^{ik} \leq j^{sa} \leq j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 \leq l_s \wedge l_s + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((n \geq n) \wedge n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 1 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_1, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3)) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_{sa}+j_{sa}^{ik}-k-j_{sa}+1} \sum_{(j_{sa}=j_{ik}+l_{sa}-l_{ik})}^{()} \sum_{j_i=j_{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{i_s}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{i_s}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_2} \frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)!} \cdot \frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!} \cdot \frac{(l_s - j_s - \mathbb{k}_1 - 1)! \cdot (j_s - 2 \cdot j_{sa} - \mathbb{k}_1 - 1)!}{(D - n - \mathbb{k}_1 - \mathbb{k}_2 - n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} - j^{sa} + j_{sa}^{ik} - j_s \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j_s + s - j_s \leq j_i \leq j_s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa} - j_{sa} = l_{ik} \wedge l_s + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_2: 2 \leq \mathbb{k}_2 \leq 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$(\mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\}$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \vee$$

$$fz S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_{ik}-k+1} \sum_{(j_{sa}=j_{ik}+l_{sa}-l_{ik})}^{()}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{()}$$

$$\sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)!}$$

$$\frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge (\mathbb{k}_2 = \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3 \wedge (\mathbb{k}_2 = \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3 \wedge (\mathbb{k}_2 = \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge (\mathbb{k}_2 = \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$j_{sa}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()}$$

$$= \sum_{l_s=j_{ik}-k}^{l_s=j_{ik}-k} \sum_{(j_{sa}=j_{ik}+l_{sa}-l_{ik})}^{()} \sum_{j_i=j_{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)!}$$

$$\frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz \overset{DSD}{S} j_s, j_{ik}, j_{sa}, j_i = \sum_{k=0}^{D-n+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})} \\ \sum_{l_i=0}^{k-k-s+1} \sum_{(j_{sa}=j_{ik}-l_{ik})} \sum_{(j_i=j_{sa}+l_i-l_{sa})} \\ \sum_{n_i=0}^n \sum_{(n_{is}=n_{is}+j_s+1)} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)} \sum_{(n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3)} \\ \frac{(n_i + 2 \cdot j_{sa} + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)!} \cdot \\ \frac{1}{(n + 2 \cdot j_{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!} \cdot \\ \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\ \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

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$s \geq 5 \wedge s = s + \mathbb{k} \wedge$

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$$fz S_{j_s, j_{ik}, j^{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\cdot)}$$

$$\sum_{j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa}}^{l_{ik}-k+1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{(\cdot)} \sum_{j_i=l_{sa}+l_i-l_{sa}}^{(\cdot)}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}^{(\cdot)}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - j_{sa} - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)!}$$

$$\frac{(n_i + j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!}{(l_s - k - 1)! \cdot (l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > n - n +$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_s \leq j^{sa} \leq j_{sa} + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$

$l_i + j_{sa} - 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$((D \geq n < n) \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 7 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

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$$(D \geq n < n \wedge I = k > 0 \wedge$$

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$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

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$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3)) \Rightarrow$$

$$fz S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()}$$

$$\sum_{j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa}}^{l_s+j_{sa}^{ik}-k} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n_{sa}+j_s-j_i-k_3}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa} - k_1 - k_2)!}{(n_i - n - k_1 - k_2)!}$$

$$\frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(l_s - k_1 - k_2)!}{(l_s - j_s - k_1 - k_2 + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > D - n + k \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - j_{sa}^{ik} + j_{sa} \leq j_i \leq n \wedge$

$l_s - j_{sa}^{ik} + j_{sa} = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{sa} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$((D \geq n < n \wedge I = k > 0) \wedge$

$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 7 \wedge s = s + k \wedge$

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$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

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$$s \geq 5 \wedge s = s + k \wedge$$

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$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$fz_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_i+j_{sa}^{ik}-k-s+1} \sum_{(j_{sa}=j_{ik}+l_{sa}-l_{ik})}^{()} \sum_{j_i=j_{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa-k_2})}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa} - k_1 - k_2)!}{(n_i - n - k_1 - k_2)!}$$

$$\frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa} - k_1 - k_2)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (i_s - 2)!}$$

$$\frac{(D - l_s)!}{(D + j_{sa} - n - l_i)! \cdot (n - i_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - j_s \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} - j_{sa}^{ik} \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} - k + j_{sa} - s = l_{sa} \wedge$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

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$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

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$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

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$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

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$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_{sa}+j_{sa}^{ik}-k-j_{sa}+1} \sum_{(j_{sa}=j_{ik}+l_{sa}-l_{ik})}^{()} \sum_{j_i=j_{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + 2 \cdot j_{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)!}$$

$$\frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - l_i)!}$$

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$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

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$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \Rightarrow$$

$$f_z^{DSD} S_{j_s, j_{ik}, j_{sa}}^{DSD} = \sum_{k=1}^{D-1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()}$$

$$\sum_{j_i=l_s+j_{sa}}^{l_s+j_{sa}} \sum_{(j_{sa}=j_{ik}+l_{sa}-l_{ik})}^{()} \sum_{j_i=j_{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j_{sa}-j_i-k_3}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa} - k_1 - k_2)!}{(n_i - n - k_1 - k_2)!}$$

$$\frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

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$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

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$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}+l_{ik})} \sum_{l_i+j_{sa}^{ik}-k-s+1} \sum_{j_{ik}=l_s+n} \sum_{(j_{ik}=j_{sa}+l_{sa})} \sum_{l_i-l_{sa}} \sum_{n_i=n+k} \sum_{(n_{is}=n_{is}+j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3} \frac{(n_i+2 \cdot j_{sa}^s + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2)!}{(l_i - n - \mathbb{k}_1 - \mathbb{k}_2)!} \cdot \frac{1}{(n_i+2 \cdot j_{sa}^s + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z^{S_{DSD}}_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()}$$

$$\sum_{j_{ik}=l_s+n+j_{sa}^{ik}-D-1}^{l_{sa}+j_{sa}^{ik}-k-j_{sa}+1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{()} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n+k-l_s-k-\mathbb{k}_1)}$$

$$\sum_{(n_{sa}=n_{ik}-l_{sa})}^{()} \sum_{(n_s=n_{ik}+j^{sa}-j_i-\mathbb{k}_3)}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_i - j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)!}$$

$$\frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} - 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa}^{ik} \leq j^{sa} \leq j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 \leq l_s \wedge l_s + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((n \geq n) \wedge n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 1 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

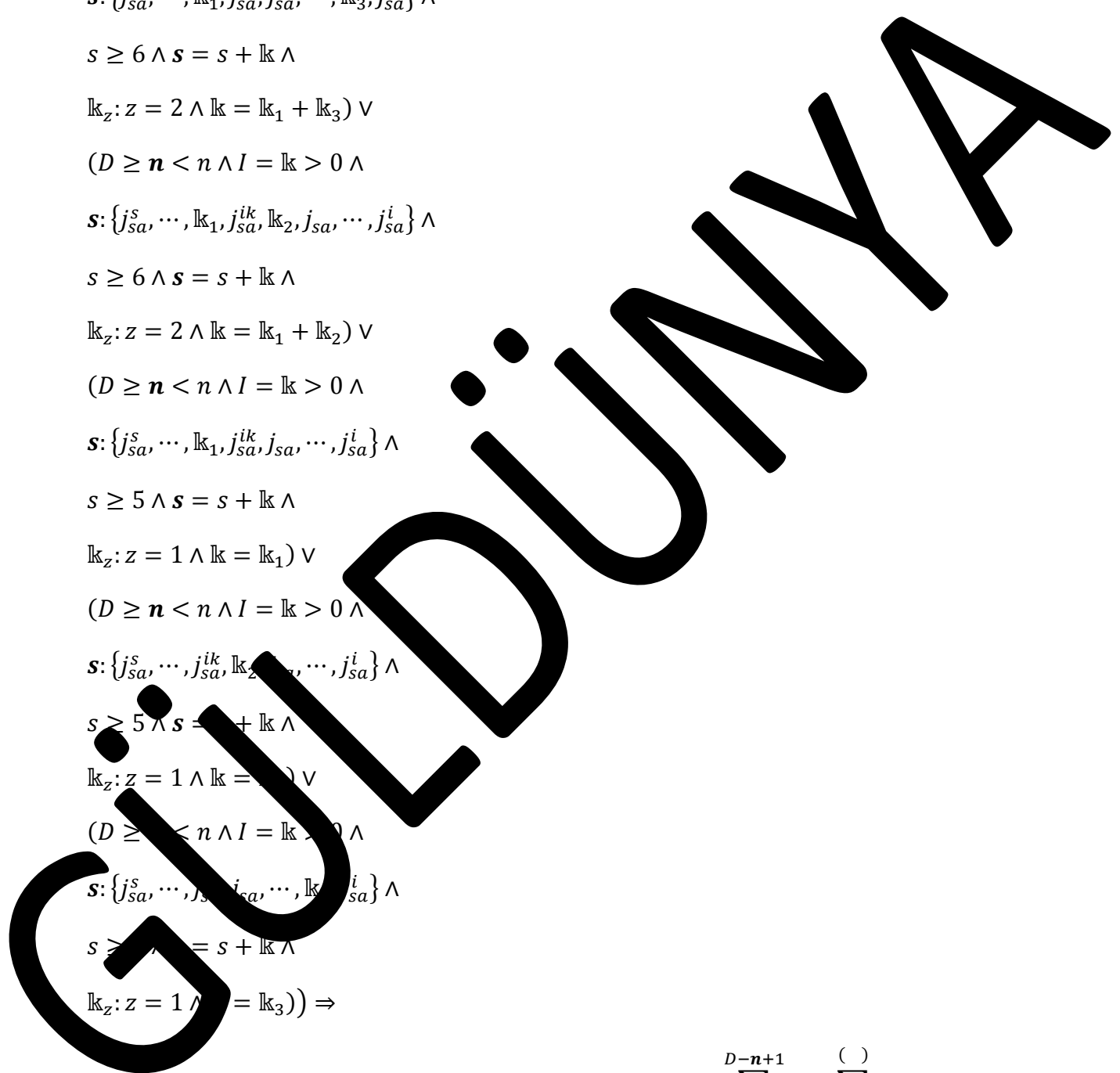
$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_1, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \Rightarrow$$

$$f_z^{S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD}} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()}$$

$$\sum_{j_{ik}=l_s+n+j_{sa}^{ik}-D-1}^{l_{ik}-k+1} \sum_{(j_{sa}=j_{ik}+l_{sa}-l_{ik})}^{()} \sum_{j_i=j_{sa}^{ik}+l_i-l_{sa}}$$



$$\sum_{n_i=n+k}^n \sum_{(n_{i_s}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{i_s}+j_s-j_{ik}-k_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_2} \frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa} - k_1 - k_2)!}{(n_i - n - k_1 - k_2)!} \cdot \frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!} \cdot \frac{(l_s - j_s - k_1 - 1)! \cdot (j_s - 2)!}{(D - n - k_1 - k_2 - n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} - j^{sa} + j_{sa}^{ik} - j_s \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j_s + s - j_s \leq j_i \leq j_s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa} - j_{sa} = l_{ik} \wedge l_s + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, l_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z \geq 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$(k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

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$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\}$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \vee$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_i+n-D-s+1)}^{(l_i-k-s+2)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s} \sum_{(j_{sa}=j_{ik}+l_{sa}-l_{ik})} \sum_{j_i=j_{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)!}$$

$$\frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge (\mathbb{k}_3 = 0) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3 \wedge (\mathbb{k}_1 = 0) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3 \wedge (\mathbb{k}_2 = 0) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge (\mathbb{k}_3 = 0) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$S_{j_s, j_{sa}, j_i}^{D, n, \mathbb{k}} = \sum_{k=1}^{l_{sa}+1} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_{sa}-k-j_{sa}+2)}$$

$$\sum_{j_s+l_{ik}-l_s}^{()} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{()} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

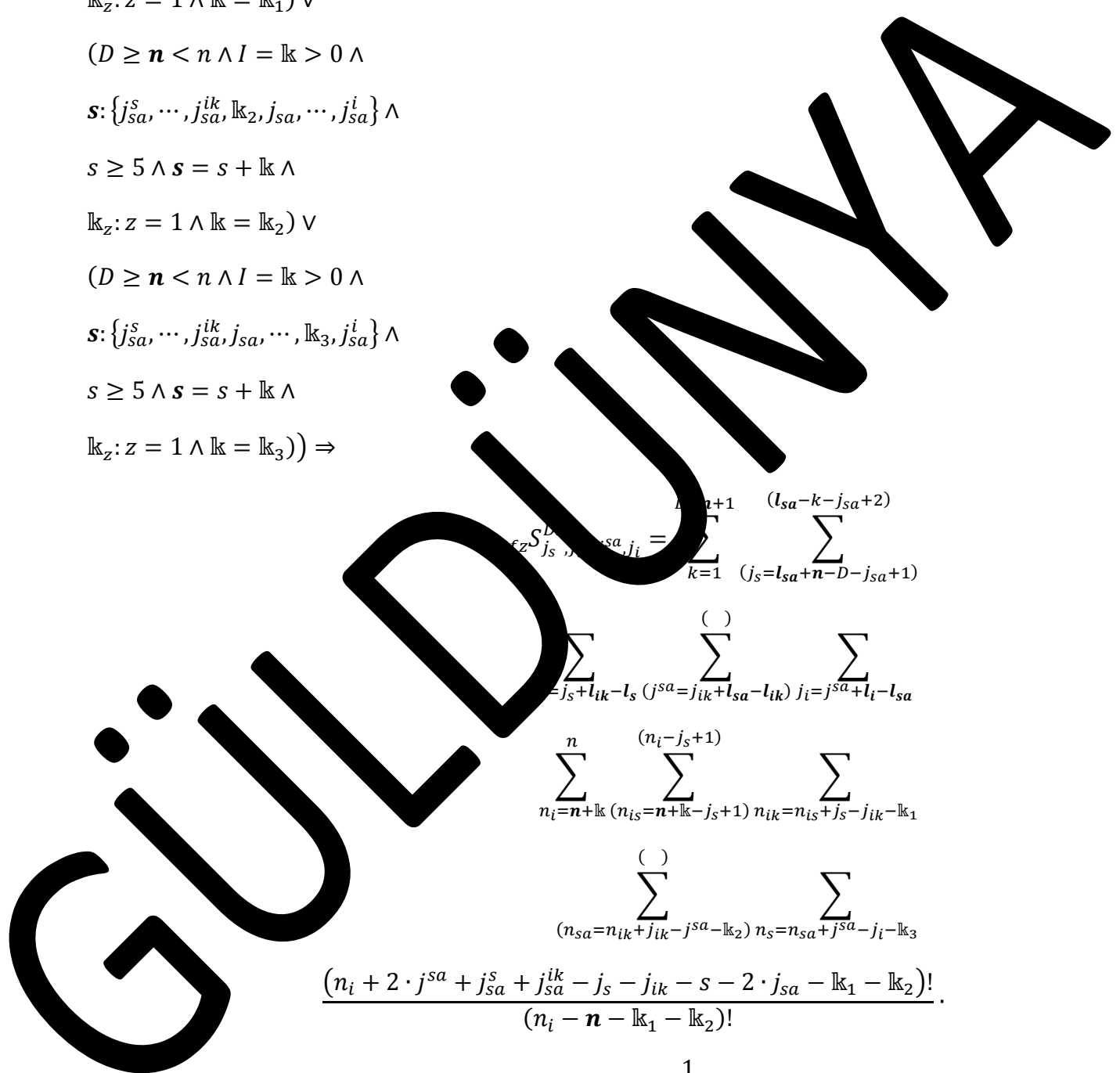
$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)!}$$

$$\frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$



$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

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$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D-1} \sum_{(j_s - k + n - D - j_{sa}^{ik} + 1)}^{(l_{ik} - k)} \\ \sum_{(j_{ik} = j_s + l_{ik} - 1)}^{(j_{sa} = j_{ik} + l_{ik} - 1)} \sum_{(j_i = j_{sa} + l_i - l_{sa})}^{(n_i = n - j_s + 1)} \sum_{(n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1)}^{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)} \sum_{(n_s = n_{sa} + j_{sa} - j_i - \mathbb{k}_3)}^{(n_i + 2 \cdot j_{sa} + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2)!} \\ \frac{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)!}{1} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$s \geq 5 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})} \sum_{j_i=l_s+l_i-l_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}} \sum_{n_{i_1}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{n_{i_2}=n_{i_1}+j_{i_1}-\mathbb{k}_3}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)!}$$

$$\frac{(n_i - 2 \cdot j^{sa} - j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!}{(l_s - k - 1)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq j_s - j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_s \leq j^{sa} \leq j_s + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} + j_{sa} - 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$((D \geq n < n) \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^{i_1}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 7 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3)) \Rightarrow$$

$$fz^{SDSD}_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{sa}-k-j_{sa}+2)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s} \sum_{\binom{()}{j^{sa}=j_{ik}+l_{sa}-l_{ik}}} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{\binom{()}{n_{is}=n+k-j_s+1}} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{\binom{()}{n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2}} \sum_{n_s=n_{sa}+j_s-j_i-k_3}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - k_1 - k_2)!}{(n_i - n - k_1 - k_2)!}$$

$$\frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}{(j_s - l_i)!}$$

$$\frac{(D - j_i - n - l_i)! \cdot (n - j_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} - j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - j_{sa}^{ik} \wedge j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + j_{sa}^{ik} = l_s \wedge l_s + j_{sa}^{ik} - j_{sa} = l_i \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = k > 0)$$

$$s: \{j_{sa}^{ik}, k_1, j_{sa}^{ik}, k_2, j_{sa}^i, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^{ik}, k_1, j_{sa}^{ik}, k_2, j_{sa}^i, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$f_z^{S_{DSD}} j_s, j_{ik}, j_{sa}, j_i = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s} \sum_{(j_{sa}=j_{ik}+l_{sa}-l_{ik})} \sum_{j_i=j_{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa} - k_1 - k_2)!}{(n_i - n - k_1 - k_2)!}$$

$$\frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa} - k_1 - k_2)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_s)!}{(D + j_{sa} - n - l_i)! \cdot (n - l_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_i + j_{sa}^{ik} - j_s \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} - j_{sa}^{ik} \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} - k_1 + j_{sa} - s = l_{sa} \wedge$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$fz S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s} \sum_{(j_{sa}=j_{ik}+l_{sa}-l_{ik})}^{()} \sum_{j_i=j_{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + 2 \cdot j_{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2)!}$$

$$\frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - l_i)!}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$((D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\}$

$s \geq 7 \wedge s = s + k \wedge$

$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k \wedge$

$k_z: z = 2 \wedge k = k_2 + k_3) \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k \wedge$

$k_z: z = 3 \wedge k = k_1 + k_3) \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k \wedge$

$k_z: z = 2 \wedge k = k_1 + k_2) \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$j_{ik}^{DSD} j_{ik} j_{sa} j_i = \sum_{l=1}^{D-n+1} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_i-k-s+2)}$$

$$\sum_{j_{ik}^{s+l_{ik}-l_s} (j^{sa}=j_{ik}+l_{sa}-l_{ik})} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{()}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)!} \cdot$$

$$\frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z^{DSD} S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=0}^{D-n+1} \sum_{(j_s=l_{sa}+n-D-k+1)}^{(l_{ik}-k-1)+2} \sum_{j_{ik}=l_{ik}-l_s}^{(j_{ik}+l_{sa}-1)} \sum_{j_i=l_i-l_{sa}}^{(j_i+l_{sa}-1)} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n_i-j_s+1)}^{(n_i-j_s)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(n_{ik}+j_s-j_{ik}-\mathbb{k}_2)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(n_{sa}+j_{sa}-j_i-\mathbb{k}_3)} \frac{(n_i + 2 \cdot j_{sa}^s + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)!} \cdot \frac{1}{(n_i + 2 \cdot j_{sa}^s + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \geq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$f_z^{S_{DSD}} j_s, j_{ik}, j^{sa}, j_i = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_s-k+1)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s}^{()} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{()} \sum_{j_i=j^{sa}+l_i-l_s}^{()}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{(j_s=j^{sa}+l_i-l_s)}^{()}$$

$$\sum_{(n_{sa}=n-k)}^{()} \sum_{(n_s=j^{sa}-j_i-l_{k_2})}^{()} \sum_{(j^{sa}=j_i-l_{k_3})}^{()}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} + j_s - j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_2)!}{(n_i - n + \mathbb{k}_1 - \mathbb{k}_2)!}$$

$$\frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} + j_s - j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n + 1 > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^s - 1 \wedge j_s + j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_s - j_{sa}^{ik} \leq j^{sa} \leq j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + j_{sa}^s \leq l_s \wedge l_s - j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n + 1 > D - n + 1 \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 1 \wedge S = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n + 1 > D - n + 1 \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_1, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_i-k-s+2)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s} \sum_{(j_{sa}=j_{ik}+l_{sa}-l_{ik})} \sum_{j_i=j_{sa}+l_i-l_{sa}}$$



$$\sum_{n_i=n+k}^n \sum_{(n_{i_s}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{i_s}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{(\)} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_2}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa} - k_1 - k_2)!}{(n_i - n - k_1 - k_2)!}$$

$$\frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(l_s - j_s - k_1 - 1)! \cdot (j_s - 2 \cdot j_{sa})!}{(D - n - k_1 - k_2 - 1)!}$$

$$\frac{(D - n - k_1 - k_2 - 1)!}{(D - n - k_1 - k_2 - 1)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} - j^{sa} + j_{sa}^{ik} - j_s \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j_s + s - j_s \leq j_i \leq j_s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa} - j_{sa} = l_{ik} \wedge l_s + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, l_{sa}, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_2: 2 \leq k_2 \leq 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$(k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\}$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \vee$$

$$fz S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_{sa}-k-j_{sa}+2)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s} \sum_{(j_{sa}=j_{ik}+l_{sa}-l_{ik})} \sum_{j_i=j_{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)!}$$

$$\frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3 \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3 \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z S_{j_s, j_{sa}, j_i}^{D, n+1} = \sum_{k=1}^{n+1} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_s-k+1)}$$

$$\sum_{k=j_s+l_{ik}-l_s}^{()} \sum_{(j_{sa}=j_{ik}+l_{sa}-l_{ik})}^{()} \sum_{j_i=j_{sa}+l_i-l_{sa}}$$

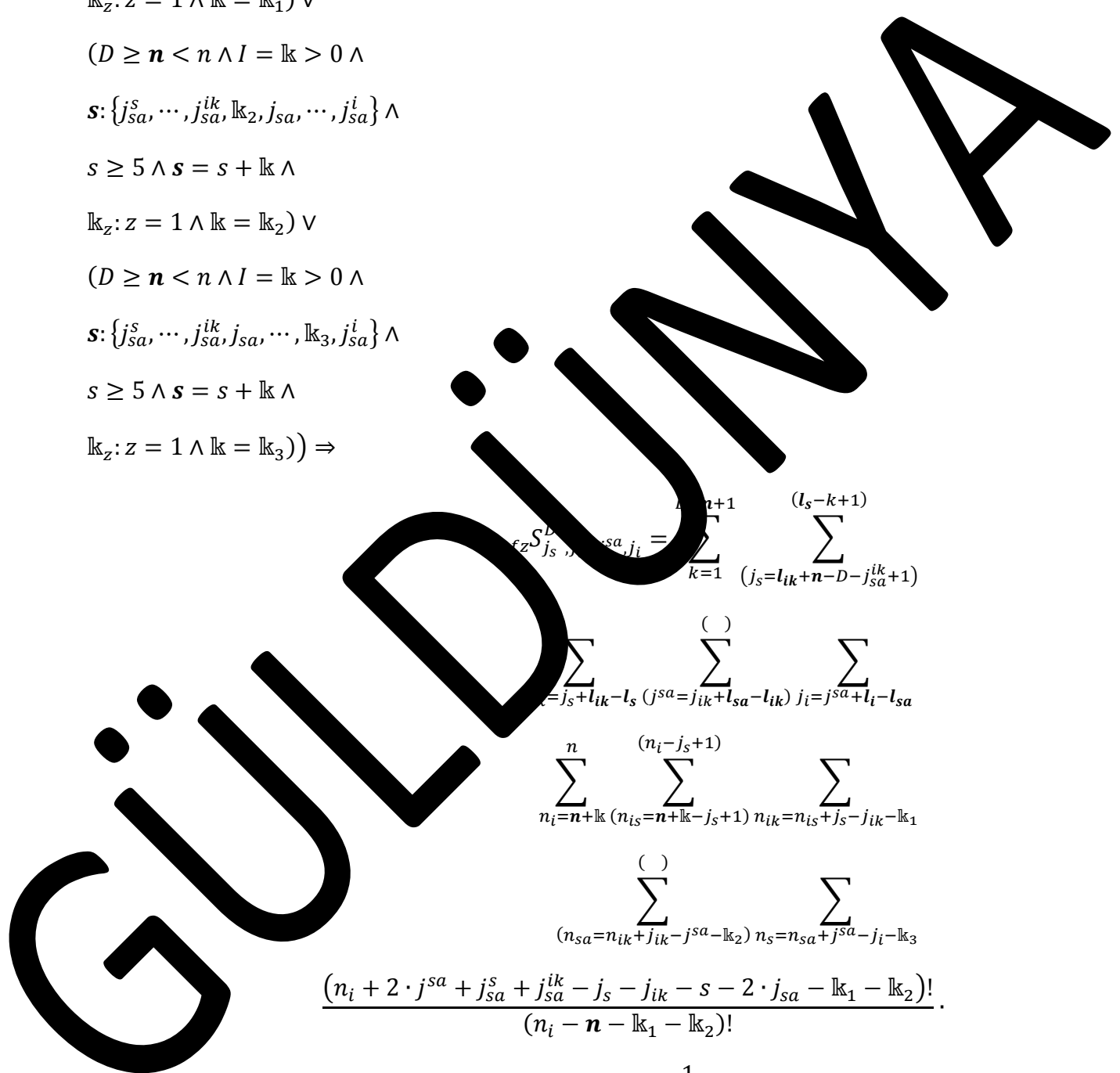
$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)!}$$

$$\frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$



$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

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$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz \sum_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} \sum_{(j_s=l_s+n-D)}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{+2}$$

$$\sum_{j_{ik}=j_s+l_{ik}} \sum_{(j_{sa}=j_{ik}-l_{ik})} \sum_{j_i=j_{sa}+l_i-l_{sa}}$$

$$\sum_{n_i}^n \sum_{(n_{is}=n+l_{is}+j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + 2 \cdot j_{sa} + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)!}$$

$$\frac{1}{(n + 2 \cdot j_{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$s \geq 5 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_{sa}-k-j_{sa}+2)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s}^{(j^{sa}=j_{ik}+l_{sa}-l_{ik})} \sum_{j_i=l_s+l_i-l_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}+1)}$$

$$\sum_{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(n_s-j_i-\mathbb{k}_3)}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)!}$$

$$\frac{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > 0 - n + \mathbb{k}$

$2 \leq j_s - j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_s \leq j^{sa} \leq j_s + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$((D \geq n < n) \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^{ik}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 7 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

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$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \Rightarrow$$

$$fz_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_{ik}-k-j_{sa}^{ik}+2)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s} \sum_{\substack{(\cdot) \\ j^{sa}=j_{ik}+l_{sa}-l_{ik}}} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{(\cdot)} \sum_{n_s=n_{sa}+j_s-j_i-l_{k_3}}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - l_{k_1} - l_{k_2})!}{(n_i - n - l_{k_1} - l_{k_2})!}$$

$$\frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}{(l_s - l_i)!}$$

$$\frac{(D - j_i - n - l_i)! \cdot (n - j_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > D - n - 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - j_{sa}^{ik} + j_{sa} \leq j_i \leq n \wedge$$

$$l_i - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n - 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$(D + s - n - l_i \leq D + l_s + s - n - 1)) \wedge$$

$$(n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, l_{k_2}, j_{sa}, \dots, l_{k_3}, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$l_{k_2}: z = 3 \wedge k = l_{k_1} + l_{k_2} + l_{k_3}) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

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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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$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}} \sum_{\binom{()}{j^{sa}=j_i+j_{sa}-s}} \sum_{j_i=l_i+n-D}^{l_{sa}+s-k-j_{sa}+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{\binom{()}{n_{is}=n+l_k-j_s+1}}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{ik}}$$

$$\sum_{\binom{()}{n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2}}}^{()}} \sum_{\binom{()}{n_s=n_{sa}+j_{sa}-j_i-l_{k_3}}}^{()}}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - l_{k_1} - l_{k_2})!}{(n_i - n - l_{k_1} - l_{k_2})!}$$

$$\frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}{(l_s - l_i)!}$$

$$\frac{(D - j_i - n - l_i)! \cdot (n - j_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > D - n - 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - j_{sa}^{ik} + j_{sa} \leq j_i \leq n \wedge$$

$$l_i - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n - 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$(D + s - n - l_i \leq D + l_s + s - n - 1)) \wedge$$

$$(n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, l_{k_2}, j_{sa}, \dots, l_{k_3}, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$l_{k_2}: z = 3 \wedge k = l_{k_1} + l_{k_2} + l_{k_3}) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

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$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

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$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3)) \Rightarrow$$

$$f_z^{S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD}} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}} \sum_{\binom{()}{j^{sa}=j_i+j_{sa}-s}} \sum_{l_{ik}+s-k-j_{sa}^{ik}+1}^{j_i=l_i+n-D}$$

$$\sum_{n_i=n+l_k}^n \sum_{\binom{()}{n_{is}=n+l_k-j_s+1}}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{\binom{()}{n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2}}}^{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}$$

$$\sum_{\binom{()}{n_s=n_{sa}+j_s-j_i-l_{k_3}}}^{(n_s=n_{sa}+j_s-j_i-l_{k_3})}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - l_{k_1} - l_{k_2})!}{(n_i - n - l_{k_1} - l_{k_2})!}$$

$$\frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(l_s - k)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(n - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > D - n - 1) \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + j_{sa} - j_{sa} \leq j_i \leq n \wedge$$

$$l_i - j_{sa}^{ik} + j_{sa} = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s = D - n - 1) \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$(D + s - n - l_i \leq D + l_s + s - n - 1)) \wedge$$

$$(D > n < n \wedge I = l_k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, l_{k_2}, j_{sa}, \dots, l_{k_3}, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + l_k \wedge$$

$$l_{k_2}: z = 3 \wedge l_k = l_{k_1} + l_{k_2} + l_{k_3}) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

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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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$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

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$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{\binom{()}{j^{sa}=j_i+l_{sa}-l_i}} \sum_{j_i=l_i+n-D}^{l_{ik}+s-k-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{\binom{()}{n_i=j_s+1}}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{\binom{()}{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}} \sum_{\binom{()}{n_s=n_{sa}+j^{sa}-j_i-l_{k_3}}}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - l_{k_1} - l_{k_2} - l_{k_3})!}{(n_i - n - l_{k_1} - l_{k_2})!}$$

$$\frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(l_s - k)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1) \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_i - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

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$$(D + s - n - l_i \leq D + l_s + s - n - 1)) \wedge$$

$$((D \geq n < n \wedge l = l_k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, l_{k_2}, j_{sa}, \dots, l_{k_3}, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + l_k \wedge$$

$$l_{k_2}: z = 3 \wedge l_k = l_{k_1} + l_{k_2} + l_{k_3}) \vee$$

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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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$$\sum_{n_i=n+\mathbb{k}}^n \sum_{\binom{()}{n_{is}=n+\mathbb{k}-j_s+1}}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{\binom{()}{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}} \sum_{\binom{()}{n_s=n_{sa}+j_s-j_i-\mathbb{k}_3}}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)!}$$

$$\frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_{ik} - 2 \cdot j_{sa})!}$$

$$\frac{(l_s - k)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

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$$\sum_{\binom{()}{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}} \sum_{\binom{()}{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)!}$$

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$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

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$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - k_1 - k_2)!}{(n_i - n - k_1 - k_2)!}$$

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$$\sum_{n_i=n+k}^n \sum_{\binom{()}{n_{is}=n+k-j_s+1}}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{\binom{()}{n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2}}^{()}} \sum_{n_s=n_{sa}+j_{sa}-j_i-k_3}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - k_1 - k_2 - k_3)!}{(n_i - n - k_1 - k_2)!}$$

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$$(D + s - n - l_i \leq D + l_s + s - n - 1)) \wedge$$

$$(n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

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$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

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$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3)) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)} \sum_{l_s+s-k}^{l_s+s-k}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{(n_s=n_{sa}+j^{sa}-j_i-k_3)}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - k_1 - k_2)!}{(n_i - n - k_1 - k_2)!}$$

$$\frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(l_s - k_1 - k_2)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(n - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > D - n - 1) \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + j_{sa} - j_{sa} \leq j_i \leq n \wedge$$

$$l_i - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s = D - n - 1) \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$(D + s - n - l_i \leq D + l_s + s - n - 1)) \wedge$$

$$((D > n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

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$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

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$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

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$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}} \sum_{\binom{()}{j^{sa}=j_i+j_{sa}-s}} \sum_{l_s+s-k}^{l_s+s-k}$$

$$\sum_{n_i=n+l_k}^n \sum_{\binom{(n_i-j_s+1)}{n_{is}=n+l_k-j_s+1}} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}}$$

$$\sum_{\binom{()}{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}} \sum_{\binom{()}{n_s=n_{sa}+j_i-j_{ik}-l_{k_3}}}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - l_{k_1} - l_{k_2} - l_{k_3})!}{(n_i - n - l_{k_1} - l_{k_2})!}$$

$$\frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}{(l_s - l_i)!}$$

$$\frac{(D - j_i - n - l_i)! \cdot (n - j_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > D - n - 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - j_{sa}^{ik} + j_{sa} \leq j_i \leq n \wedge$$

$$l_i - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

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$$(D + s - n - l_i \leq D + l_s + s - n - 1)) \wedge$$

$$(n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, l_{k_2}, j_{sa}, \dots, l_{k_3}, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$l_{k_2}: z = 3 \wedge k = l_{k_1} + l_{k_2} + l_{k_3}) \vee$$

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$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

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$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, \dots, j_{sa}^i\} \wedge$$

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$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

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$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{\binom{()}{j^{sa}=j_i+l_{sa}-l_i}} \sum_{l_s+s-k}^{l_s+s-k}$$

$$\sum_{n_i=n+k}^n \sum_{\binom{(n_i-j_s+1)}{n_{is}=n+k-j_s+1}} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{\binom{()}{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}} \sum_{\binom{()}{n_s=n_{sa}+j_i-j_{ik_3}}}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - k_1 - k_2)!}{(n_i - n - k_1 - k_2)!}$$

$$\frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(l_s - k_1 - k_2)!}{(l_s - j_{sa} - k + 1)! \cdot (j_s - 2)!}$$

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$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + j_{sa} - j_{sa} \leq j_i \leq n \wedge$$

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$$(D + s - n - l_i \leq D + l_s + s - n - 1)) \wedge$$

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$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)}^{(l_{sa}-k+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{(n_s=n_{sa}+j_s-j_i-k_3)}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - l_{ik_1} - l_{ik_2})!}{(n_i - n - k_1 - k_2)!}$$

$$\frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})}$$

$$\frac{(l_s - k_1 - k_2)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(n - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > D - n - 1 \wedge$$

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$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - j_{sa}^{ik} + j_{sa} \leq j_i \leq n \wedge$$

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$$(D + s - n - l_i \leq D + l_s + s - n - 1)) \wedge$$

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$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

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$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z^{S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD}} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{(l_{ik}+j_{sa}-k-j_{sa}^{ik}+1)} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{()} \sum_{(n_s=n_{sa}+j_i-j_{l_3})}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - l_{k_1} - l_{k_2})!}{(n_i - n - l_{k_1} - l_{k_2})!}$$

$$\frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(l_s - k)!}{(l_s - j_{sa} - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

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$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_i - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_i - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$(D + s - n - l_i \leq D + l_s + s - n - 1)) \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, l_{k_2}, j_{sa}, \dots, l_{k_3}, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$l_{k_2}: z = 3 \wedge k = l_{k_1} + l_{k_2} + l_{k_3}) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

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$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

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$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z^{S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD}} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(l_{ik}+j_{sa}-k-j_{sa}^{ik}+1)} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa} - k_1 - k_2)!}{(n_i - n - k_1 - k_2)!}$$

$$\frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(l_s - k_1 - k_2)!}{(l_s - j_s - k_1 - k_2 + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1) \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_i - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

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$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

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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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$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, \dots, j_{sa}^i\} \wedge$$

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$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

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$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(l_{ik}+j_{sa}-k-j_{sa}^{ik}+1)} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa} - k_1 - k_2)!}{(n_i - n - k_1 - k_2)!}$$

$$\frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(l_s - k_1 - k_2)!}{(l_s - j_s - k_1 - k_2 + 1)! \cdot (j_s - 2)!}$$

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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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$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

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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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$$k_z: z = 1 \wedge k = k_1) \vee$$

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$$f_z^{S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD}} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}} \sum_{(l_s+j_{sa}-k)}^{(l_s+j_{sa}-k)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{(n_s=n_{sa}+j_s-j_i-k_3)}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - k_1 - k_2)!}{(n_i - n - k_1 - k_2)!}$$

$$\frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})}$$

$$\frac{(l_s - k_1 - k_2)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

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$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - j_{sa}^{ik} + j_{sa} \leq j_i \leq n \wedge$$

$$l_i - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

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$$s \geq 7 \wedge s = s + k \wedge$$

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$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

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$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

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$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)}^{(l_s+j_{sa}-k)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{(\)} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - k_1 - k_2)!}{(n_i - n - k_1 - k_2)!} \cdot \frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_{ik} - s - 2 \cdot j_{sa})!} \cdot \frac{(l_s - k_1 - k_2)!}{(l_s - j_{sa} - k_1 - k_2 + 1)! \cdot (j_s - 2)!} \cdot \frac{(n - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > D - n - 1 \wedge$$

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$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3)) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)}^{(l_s+j_{sa}-k)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{(n_s=n_{sa}+j^{sa}-j_i-k_3)}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - k_1 - k_2 - k_3)!}{(n_i - n - k_1 - k_2)!}$$

$$\frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})}$$

$$\frac{(l_s - k_1 - k_2 - k_3)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(n - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > D - n - 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - j_{sa}^{ik} + j_{sa} \leq j_i \leq n \wedge$$

$$l_i - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n - 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$(D + s - n - l_i \leq D + l_s + s - n - 1)) \wedge$$

$$(n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{lk}-j_{sa}} \sum_{(l_s+j_{sa}-k)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+lk}^n \sum_{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-lk_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-lk_3}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - lk_1 - lk_2)!}{(n_i - n - lk_1 - lk_2)!}$$

$$\frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_i - j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(l_s - k)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(n - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > D - n - 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + j_{sa} - j_{sa} \leq j_i \leq n \wedge$$

$$l_i - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s = D - n - 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$(D + s - n - l_i \leq D + l_s + s - n - 1)) \wedge$$

$$(D > n < n \wedge I = lk > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, lk_1, j_{sa}^{ik}, lk_2, j_{sa}, \dots, lk_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + lk \wedge$$

$$lk_z: z = 3 \wedge lk = lk_1 + lk_2 + lk_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

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$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}} \sum_{(l_s+j_{sa}-k)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j_s-j_i-k_3}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - l_{ik_1} - l_{ik_2})!}{(n_i - n - k_1 - l_{ik_1})!}$$

$$\frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})}$$

$$\frac{(l_s - k_1 - k_2 - k_3)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(n - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > D - n - 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - j_{sa}^{ik} + j_{sa} \leq j_i \leq n \wedge$$

$$l_i - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n - 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$(D + s - n - l_i \leq D + l_s + s - n - 1)) \wedge$$

$$(n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

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$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3)) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)}^{(l_s+j_{sa}-k)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{(\)} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - k_1 - k_2)!}{(n_i - n - k_1 - k_2)!} \cdot \frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_{ik} - s - 2 \cdot j_{sa})!} \cdot \frac{(l_s - k_1 - k_2)!}{(l_s - j_{sa} - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(n - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > D - n - 1 \wedge 2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_i + j_{sa} - s \wedge j^{sa} + j_{sa} - j_{sa} \leq j_i \leq n \wedge l_i - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee (D \geq n < n \wedge l_s = D - n - 1 \wedge 1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge (D + s - n - l_i \leq D + l_s + s - n - 1)) \wedge ((D > n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge s \geq 7 \wedge s = s + k \wedge k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

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$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3)) \Rightarrow$$

$$f_z^{S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD}} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_{sa}+j_{sa}^{ik}-k-j_{sa}+1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - k_1 - k_2)!}{(n_i - n - k_1 - k_2)!} \cdot \frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_{ik} - 2 \cdot j_{sa})!} \cdot \frac{(l_s - k_1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > D - n - 1) \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_i - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D > n < n \wedge l_s = D - n - 1) \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_i - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$(D + s - n - l_i \leq D + l_s + s - n - 1)) \wedge$$

$$((D \geq n < n \wedge l = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

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$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

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$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

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$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_{ik}-k+1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{(j^{sa}-k_2)} \sum_{(n_s=n_{sa}+j^{sa}-j_i-k_3)}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - k_1 - k_2)!}{(n_i - n - k_1 - k_2)!}$$

$$\frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(l_s - k_1 - k_2)!}{(l_s - j_s - k_1 - k_2 + 1)! \cdot (j_s - 2)!}$$

$$\frac{(n - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > D - n - 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + j_{sa} - j_{sa} \leq j_i \leq n \wedge$$

$$l_i - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

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$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

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$$(D + s - n - l_i \leq D + l_s + s - n - 1)) \wedge$$

$$(D > n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_2: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

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$$\sum_{j_{ik} = l_i + n + j_{sa}^{ik} - D - s}^{l_{ik} - k + 1} \sum_{(j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}^{()} \sum_{j_i = j^{sa} + l_i - l_{sa}}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik}}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - k_2)}^{()} \sum_{n_s = n_{sa} + j^{sa} - j_i - k_3}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - k_1 - k_2)!}{(n_i - n - k_1 - k_2)!}$$

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$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - k_2)} \sum_{(n_s = n_{sa} + j^{sa} - j_i - k_3)}$$

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$$k_z: z = 1 \wedge k = k_1) \vee$$

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$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{(n_s=n_{sa}+j^{sa}-j_i-k_3)}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - k_1 - k_2)!}{(n_i - n - k_1 - k_2)!} \cdot \frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_{ik} - 2 \cdot j_{sa})!} \cdot \frac{(l_s - k_1)!}{(l_s - j_s - k_1 + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1) \wedge$$

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$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-l_{k_2})} \sum_{(n_s=n_{sa}+j_{sa}-j_i-l_{k_3})}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - l_{k_1} - l_{k_2})!}{(n_i - n - l_{k_1} - l_{k_2})!}$$

$$\frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_{ik} - j_s - 2 \cdot j_{sa})!}$$

$$\frac{(l_s - k)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

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$l_i - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$(D + s - n - l_i \leq D + l_s + s - n - 1)) \wedge$

$((D \geq n < n \wedge l = l > 0) \wedge$

$s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, l_{k_2}, j_{sa}, \dots, l_{k_3}, j_{sa}^i\} \wedge$

$s \geq 7 \wedge s = s + l_k \wedge$

$l_{k_2}: z = 3 \wedge l_k = l_{k_1} + l_{k_2} + l_{k_3}) \vee$

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$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

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$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-k} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n_{sa}+j_s-j_i-k_3}^{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - k_1 - k_2)!}{(n_i - n - k_1 - k_2)!}$$

$$\frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(l_s - k_1 - k_2)!}{(l_s - j_s - k_1 - k_2 + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1) \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + j_{sa} - j_{sa} \leq j_i \leq n \wedge$$

$$l_i - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D > n < n \wedge l_s > D - n + 1) \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

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$$(D + s - n - l_i \leq D + l_s + s - n - 1)) \wedge$$

$$((D \geq n < n \wedge l_s > D - n + 1) \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_2: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

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$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

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$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-k} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-l_{k_2})} \sum_{(n_s=n_{sa}+j_{sa}-j_i-l_{k_3})}$$

$$\frac{(n_i + 2 \cdot j_{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - l_{k_1} - l_{k_2})!}{(n_i - n - l_{k_1} - l_{k_2})!}$$

$$\frac{1}{(n + 2 \cdot j_{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(l_s - k)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > D - n - 1) \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_i - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D > n < n \wedge l_s = D - n + 1) \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_i - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$(D + s - n - l_i \leq D + l_s + s - n - 1)) \wedge$$

$$((D \geq n < n \wedge l = l > 0) \wedge$$

$$s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, l_{k_2}, j_{sa}, \dots, l_{k_3}, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + l_k \wedge$$

$$l_{k_2}: z = 3 \wedge l_k = l_{k_1} + l_{k_2} + l_{k_3}) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

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$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

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$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

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$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-k} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{(n_s=n_{sa}+j^{sa}-j_i-k_3)}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - k_1 - k_2)!}{(n_i - n - k_1 - k_2)!}$$

$$\frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_{ik} - j_s - 2 \cdot j_{sa})!}$$

$$\frac{(l_s - k_1 - k_2)!}{(l_s - j_s - k_1 - k_2 + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

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$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

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$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

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$$(D + s - n - l_i \leq D + l_s + s - n - 1)) \wedge$$

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$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

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$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

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$$k_z: z = 1 \wedge k = k_1) \vee$$

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$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

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$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-k} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j_{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-l_{k_2})} \sum_{(n_s=n_{sa}+j_{sa}-j_i-l_{k_3})}$$

$$\frac{(n_i + 2 \cdot j_{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - l_{k_1} - l_{k_2})!}{(n_i - n - l_{k_1} - l_{k_2})!}$$

$$\frac{1}{(n + 2 \cdot j_{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(l_s - k)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

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$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$

$l_i - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$

$(D > n < n \wedge l_s = D - n + 1) \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$

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$l_i - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$

$(D + s - n - l_i \leq D + l_s + s - n - 1)) \wedge$

$((D \geq n < n \wedge l = l > 0) \wedge$

$s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, l_{k_2}, j_{sa}, \dots, l_{k_3}, j_{sa}^i\} \wedge$

$s \geq 7 \wedge s = s + l_k \wedge$

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$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

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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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$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

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$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \Rightarrow$$

$$f_z^{DSD} S_{j_s^{j_{ik} j_{sa}^{j_i}}} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{sa}-k-j_{sa}+2)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s} \sum_{\binom{()}{j^{sa}=j_{ik}+l_{sa}-l_{ik}}} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+l_k}^n \sum_{\binom{()}{n_{is}=n+l_k-j_s+1}} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{ik}}$$

$$\sum_{\binom{()}{n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2}}} \sum_{n_s=n_{sa}+j_s-j_i-l_{k_3}}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - l_{k_1} - l_{k_2})!}{(n_i - n - l_{k_1} - l_{k_2})!}$$

$$\frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}{(l_s - l_i)!}$$

$$\frac{(D - j_i - n - l_i)! \cdot (n - j_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

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$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - j_{sa}^{ik} + j_{sa} \leq j_i \leq n \wedge$$

$$l_i - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n - 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$(D + s - n - l_i \leq D + l_s + s - n - 1)) \wedge$$

$$(n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, l_{k_2}, j_{sa}, \dots, l_{k_3}, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$l_{k_2}: z = 3 \wedge k = l_{k_1} + l_{k_2} + l_{k_3}) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

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$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

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$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

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$$\sum_{j_{ik}=j_s+l_{ik}-l_s} \sum_{\binom{()}{j^{sa}=j_{ik}+l_{sa}-l_{ik}}} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+l_k}^n \sum_{\binom{()}{n_{is}=n+l_k-j_s+1}}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{ik}}$$

$$\sum_{\binom{()}{n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2}}}^{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{n_s=n_{sa}+j_s-j_i-l_{k_3}}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - l_{k_1} - l_{k_2})!}{(n_i - n - l_{k_1} - l_{k_2})!}$$

$$\frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}{(l_s - l_i)!}$$

$$\frac{(D - j_i - n - l_i)! \cdot (n - j_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

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$$k_z: z = 1 \wedge k = k_1) \vee$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{n_s=n_{sa}+j^{sa}-j_i-l_{k_3}}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - l_{k_1} - l_{k_2})!}{(n_i - n - l_{k_1} - l_{k_2})!}$$

$$\frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(l_s - k)}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

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$$\sum_{\binom{()}{n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2}}} \sum_{n_s=n_{sa}+j^{sa}-j_i-l_{k_3}}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - l_{k_1} - l_{k_2})!}{(n_i - n - l_{k_1} - l_{k_2})!}$$

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$$\sum_{j_{ik}=j_s+l_{ik}-l_s} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{n_s=n_{sa}+j^{sa}-j_i-l_{k_3}}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - l_{k_1} - l_{k_2})!}{(n_i - n - l_{k_1} - l_{k_2})!}$$

$$\frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(l_s - k)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > D - n - 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s - j_{sa} + j_{sa} \leq j_i \leq n \wedge$$

$$l_i - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n - 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$(D + s - n - l_i \leq D + l_s + s - n - 1)) \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, l_{k_2}, j_{sa}, \dots, l_{k_3}, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$l_{k_2}: z = 3 \wedge k = l_{k_1} + l_{k_2} + l_{k_3}) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

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$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

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$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \Rightarrow$$

$$f_z^{DSD} S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{\binom{()}{j^{sa}=j_{ik}+l_{sa}-l_{ik}}} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{\binom{()}{n_{is}=n+k-j_s+1}} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{\binom{()}{n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2}} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - k_1 - k_2)!}{(n_i - n - k_1 - k_2)!}$$

$$\frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(l_s - k_1 - k_2)!}{(l_s - j_{sa} - k_1 - k_2 + 1)! \cdot (j_s - 2)!}$$

$$\frac{(n - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > D - n - 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + j_{sa} - j_{sa} \leq j_i \leq n \wedge$$

$$l_i - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s = D - n - 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$(D + s - n - l_i \leq D + l_s + s - n - 1)) \wedge$$

$$((D > n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_2: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

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$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

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$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \Rightarrow$$

$$f_z^{DSD} S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s} \sum_{\binom{()}{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+l_k}^n \sum_{\binom{()}{n_{is}=n+l_k-j_s+1}}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{\binom{()}{n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2}}} \sum_{n_s=n_{sa}+j^{sa}-j_i-l_{k_3}}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - l_{k_1} - l_{k_2})!}{(n_i - n - l_{k_1} - l_{k_2})!}$$

$$\frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(l_s - k)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > D - n - 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + j_{sa} \leq j_i \leq n \wedge$$

$$l_i - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n - 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$(D + s - n - l_i \leq D + l_s + s - n - 1)) \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, l_{k_2}, j_{sa}, \dots, l_{k_3}, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$l_{k_2}: z = 3 \wedge k = l_{k_1} + l_{k_2} + l_{k_3}) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

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$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \Rightarrow$$

$$f_z^{DSD} S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{\binom{()}{j^{sa}=j_{ik}+l_{sa}-l_{ik}}} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{\binom{()}{n_{is}=n+k-j_s+1}} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{\binom{()}{n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2}} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - k_1 - k_2)!}{(n_i - n - k_1 - k_2)!}$$

$$\frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(l_s - k_1 - k_2)!}{(l_s - j_{sa} - k_1 - k_2 + 1)! \cdot (j_s - 2)!}$$

$$\frac{(n - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > D - n - 1) \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + j_{sa} - j_{sa} \leq j_i \leq n \wedge$$

$$l_i - j_{sa}^{ik} + j_{sa} \leq l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s = D - n - 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$(D + s - n - l_i \leq D + l_s + s - n - 1)) \wedge$$

$$(D > n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_2: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

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$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

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$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \Rightarrow$$

$$f_z^{DSD} S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{\binom{()}{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{\binom{()}{n_{is}=n+k-j_s+1}} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{\binom{()}{n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2}} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - k_1 - k_2)!}{(n_i - n - k_1 - k_2)!}$$

$$\frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_i - j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(l_s - k_1 - k_2)!}{(l_s - j_s - k_1 - k_2 + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_j)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > D - n - 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + j_{sa} - s - j_{sa} \leq j_i \leq n \wedge$$

$$l_i - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n - 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} + j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$(D + j_{sa} - 1 < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_2: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

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$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

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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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$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

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$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

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$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3)) \Rightarrow$$

$$f_z^{S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD}} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{\binom{()}{j^{sa}=j_i+l_{sa}-l_i}} \sum_{l_{ik}+s-k-j_{sa}^{ik}+1} \sum_{n_i=n+k}^n \sum_{\binom{(n_i-j_s+1)}{n_{is}=n+k-j_s+1}} \sum_{n_{ik}=n_{is}+j_s-j_{ik}} \sum_{\binom{()}{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}} \sum_{n_s=n_{sa}+j_s-j_i-k_3} \frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - l_{sa} - k_1 - k_2)!}{(n_i - n - k_1 - k_2)!} \cdot \frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_{ik} - s - 2 \cdot j_{sa})!} \cdot \frac{(l_s - k_1 - k_2)!}{(l_s - j_s - k_1 - k_2 + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\begin{aligned} & ((D \geq n < n \wedge l_s > D - n - 1) \wedge \\ & 2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge \\ & l_i - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee \\ & (D > n < n \wedge l_s = D - n - 1) \wedge \\ & 1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge \\ & l_i - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge \\ & (D + j_{sa} - 1 < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge \\ & ((D \geq n < n \wedge l = k > 0) \wedge \end{aligned}$$

$$\begin{aligned} & s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge \\ & s \geq 7 \wedge s = s + k \wedge \\ & k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee \end{aligned}$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3)) \Rightarrow$$

$$f_z^{S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD}} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{\binom{()}{j^{sa}=j_i+l_{sa}-l_i}} \sum_{l_s+s-k}^{l_s+s-k}$$

$$\sum_{n_i=n+k}^n \sum_{\binom{(n_i-j_s+1)}{n_{is}=n+k-j_s+1}} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{\binom{()}{n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2}} \sum_{n_s=n_{sa}+j_s-j_i-k_3}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - k_1 - k_2)!}{(n_i - n - k_1 - k_2)!}$$

$$\frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(l_s - k_1 - k_2)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(n - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > D - n - 1) \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + j_{sa} - j_{sa} \leq j_i \leq n \wedge$$

$$l_i - j_{sa}^{ik} + j_{sa} \leq l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s = D - n - 1) \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$(D + j_{sa} - 1 < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$(D > n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

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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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$$(D \geq n < n \wedge I = k > 0 \wedge$$

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$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

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$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3)) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}} \sum_{\binom{()}{j^{sa}=j_i+l_{sa}-l_i}} \sum_{l_s+s-k}^{l_s+s-k}$$

$$\sum_{n_i=n+k}^n \sum_{\binom{(n_i-j_s+1)}{n_{is}=n+k-j_s+1}} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{ik}}$$

$$\sum_{\binom{()}{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}} \sum_{\binom{()}{n_s=n_{sa}+j^{sa}-j_i-k_3}}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - k_1 - k_2 - k_3)!}{(n_i - n - k_1 - k_2)!}$$

$$\frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})}$$

$$\frac{(l_s - k_1 - k_2 - k_3)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(n - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > D - n - 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - j_{sa}^{ik} + j_{sa} \leq j_i \leq n \wedge$$

$$l_i - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n - 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$(D + j_{sa} - 1 - k \wedge l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$(n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

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$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

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$$k_z: z = 1 \wedge k = k_2) \vee$$

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$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3)) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{\binom{()}{j^{sa}=j_i+l_{sa}-l_i}} \sum_{l_s+s-k}^{l_s+s-k}$$

$$\sum_{n_i=n+k}^n \sum_{\binom{(n_i-j_s+1)}{n_{is}=n+k-j_s+1}} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{\binom{()}{n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2}} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - k_1 - k_2)!}{(n_i - n - k_1 - k_2)!}$$

$$\frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(l_s - k_1 - k_2)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(n - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > D - n - 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + j_{sa} - j_{sa} \leq j_i \leq n \wedge$$

$$l_i - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s = D - n - 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$(D + j_{sa} - 1 < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$(D > n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_2: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

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$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z^{S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD}} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(l_{ik}+j_{sa}-k-j_{sa}^{ik}+1)} \sum_{(j^{sa}=l_{sa}+n-D)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa} - k_1 - k_2)!}{(n_i - n - k_1 - k_2)!}$$

$$\frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_{ik} - 2 \cdot j_{sa})!}$$

$$\frac{(l_s - k_1 - k_2)!}{(l_s - j_s - k_1 - k_2)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

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$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_i \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_i - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D > n < n \wedge l_s = D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_i - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$(D + j_{sa} - 1 < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$((D \geq n < n \wedge l = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

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$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

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$$s \geq 6 \wedge s = s + k \wedge$$

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$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

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$$s \geq 6 \wedge s = s + k \wedge$$

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$$f_z^{S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD}} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_s+j_{sa}-k)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{(\)} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - k_1 - k_2)!}{(n_i - n - k_1 - k_2)!}$$

$$\frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_i - j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(l_s - k_1 - k_2)!}{(l_s - j_s - k_1 - k_2 + 1)! \cdot (j_s - 2)!}$$

$$\frac{(n - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > D - n - 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s - j_{sa} + j_{sa} \leq j_i \leq n \wedge$$

$$l_i - j_{sa}^{ik} + j_{sa} \leq l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s = D - n - 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$(D + j_{sa} - 1 < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$(D > n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

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$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, \dots, j_{sa}^i\} \wedge$$

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$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_s+j_{sa}-k)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{(\)} \sum_{(n_s=n_{sa}+j^{sa}-j_i-l_{k_3})}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - l_{k_1} - l_{k_2} - l_{k_3})!}{(n_i - n - l_{k_1} - l_{k_2})!}$$

$$\frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})}$$

$$\frac{(l_s - k)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(n - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

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$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

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$$(n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, l_{k_2}, j_{sa}, \dots, l_{k_3}, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

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$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{(\)} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - k_1 - k_2)!}{(n_i - n - k_1 - k_2)!}$$

$$\frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_i - j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(l_s - k_1 - k_2)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(n - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

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$$f_z^{S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD}} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()}$$

$$\sum_{j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa}}^{l_{ik}-k+1} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j_{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j_{sa}-j_i-k_3}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - k_1 - k_2)!}{(n_i - n - k_1 - k_2)!}$$

$$\frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(l_s - k_1 - k_2)!}{(l_s - j_s - k_1 - k_2 + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > D - n - 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_i + j_{sa} - s \wedge j^{sa} + j_{sa} - j_{sa} \leq j_i \leq n \wedge$$

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$$(D \geq n < n \wedge l_s \leq D - n - 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

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$$(D + j_{sa} - 1 < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

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$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, \dots, j_{sa}^i\} \wedge$$

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$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

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$$\sum_{j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa}}^{l_s+j_{sa}^{ik}-k} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j_{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-k_2)} \sum_{(n_s=n_{sa}+j_{sa}-j_i-k_3)}$$

$$\frac{(n_i + 2 \cdot j_{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - 2 \cdot k_1 - k_2)!}{(n_i - n - k_1 - k_2)!}$$

$$\frac{1}{(n + 2 \cdot j_{sa} + j_{sa}^s + j_{sa}^{ik} - j_{ik} - 2 \cdot j_{sa})!}$$

$$\frac{(l_s - k_1)}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

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$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

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$$s \geq 6 \wedge s = s + k \wedge$$

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$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

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$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3)) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa}}^{l_s+j_{sa}^{ik}-k} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n_{sa}+j_s-j_i-k_3}^{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - k_1 - k_2)!}{(n_i - n - k_1 - k_2)!} \cdot \frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - 2 \cdot j_{sa})!} \cdot \frac{(l_s - k_1 - k_2)!}{(l_s - j_s - k_1 - k_2 + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1) \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_i - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D > n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_i - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$(D + j_{sa} - 1 < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$((D \geq n < n \wedge l = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

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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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$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3)) \Rightarrow$$

$$f_z^{DSD} S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa}}^{l_s+j_{sa}^{ik}-k} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j_{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-l_{k_2})} \sum_{(n_s=n_{sa}+j_{sa}-j_i-l_{k_3})}$$

$$\frac{(n_i + 2 \cdot j_{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - l_{k_1} - l_{k_2})!}{(n_i - n - l_{k_1} - l_{k_2})!}$$

$$\frac{1}{(n + 2 \cdot j_{sa} + j_{sa}^s + j_{sa}^{ik} - j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(l_s - k)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1) \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_i - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D > n < n \wedge l_s = D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_i - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$(D + j_{sa} - 1 < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$((D \geq n < n \wedge l = l_k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, l_{k_2}, j_{sa}, \dots, l_{k_3}, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + l_k \wedge$$

$$l_{k_2}: z = 3 \wedge l_k = l_{k_1} + l_{k_2} + l_{k_3}) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

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$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

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$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \Rightarrow$$

$$f_z^{S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD}} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - l_{sa} - k_1 - k_2)!}{(n_i - n - k_1 - k_2)!}$$

$$\frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_i - j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(l_s - k_1 - k_2)!}{(l_s - j_s - k_1 - k_2 + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_j)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > D - n - 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + j_{sa} - s \leq j_i \leq n \wedge$$

$$l_i - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n - 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$(D + j_{sa} - 1 < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

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$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

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$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

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$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3)) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_s-k-1)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - l_{sa} - k_1 - k_2)!}{(n_i - n - k_1 - k_2)!}$$

$$\frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_i - j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(l_s - k_1 - k_2)!}{(l_s - j_s - k_1 - k_2 + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_j)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > D - n - 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + j_{sa} - s - j_{sa} \leq j_i \leq n \wedge$$

$$l_i - j_{sa}^{ik} + j_{sa} \leq l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n - 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$(D + j_{sa} - 1 < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

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$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

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$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

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$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3)) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_s-k-1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{(n_s=n_{sa}+j_s-j_i-k_3)}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - k_1 - k_2)!}{(n_i - n - k_1 - k_2)!}$$

$$\frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(l_s - k_1 - k_2)!}{(l_s - j_s - k_1 - k_2 + 1)! \cdot (j_s - 2)!}$$

$$\frac{(n - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > D - n - 1) \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_i + j_{sa} - s \wedge j^{sa} + j_{sa} \leq j_i \leq n \wedge$$

$$l_i - j_{sa}^{ik} + j_{sa} \leq l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s = D - n - 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$(D + j_{sa} - 1 < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$(D > n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_s-k-1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{\binom{()}{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{\binom{()}{n_{is}=n+k-j_s+1}} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{\binom{()}{n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2}} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - k_1 - k_2)!}{(n_i - n - k_1 - k_2)!}$$

$$\frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(l_s - k_1 - k_2)!}{(l_s - j_s - k_1 - k_2 + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_j)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > D - n - 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + j_{sa} - j_{sa} \leq j_i \leq n \wedge$$

$$l_i - j_{sa}^{ik} + j_{sa} \leq l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s = D - n - 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa}^{ik} - j_{sa} < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1)) \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}} \sum_{\binom{()}{j^{sa}=j_i+l_{sa}-l_i}} \sum_{l_s+s-k}^{l_s+s-k} \sum_{n_i=n+k}^n \sum_{\binom{(n_i-j_s+1)}{n_{is}=n+k-j_s+1}} \sum_{n_{ik}=n_{is}+j_s-j_{ik}} \sum_{\binom{()}{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3} \frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - k_1 - k_2)!}{(n_i - n - k_1 - k_2)!} \cdot \frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_{ik} - s - 2 \cdot j_{sa})!} \cdot \frac{(l_s - k_1 - k_2)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(n - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\begin{aligned} & ((D \geq n < n \wedge l_s > D - n - 1 \wedge \\ & 2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + j_{sa} - j_{sa} \leq j_i \leq n \wedge \\ & l_i - j_{sa}^{ik} + j_{sa} \leq l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee \\ & (D \geq n < n \wedge l_s = D - n - 1 \wedge \\ & 1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge \\ & (D + j_{sa}^{ik} - j_{sa} < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1)) \wedge \\ & ((D \geq n < n \wedge I = k > 0 \wedge \end{aligned}$$

$$\begin{aligned} & s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge \\ & s \geq 7 \wedge s = s + k \wedge \\ & k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee \end{aligned}$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3)) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}} \sum_{(l_s+j_{sa}-k)} \sum_{(j_s^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik})} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_i-j_s+1)} \sum_{n_{ik}=n_i+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{(n_s=n_{sa}+j^{sa}-j_i-k_3)}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - k_1 - k_2)!}{(n_i - n - k_1 - k_2)!}$$

$$\frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(l_s - k)}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > D - n - 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + j_{sa} \leq j_i \leq n \wedge$$

$$l_i - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n - 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_i - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$(D + j_{sa}^{ik} - j_{sa} < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1)) \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3)) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_s+j_{sa}^{ik}-k} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{(n_s=n_{sa}+j_s-j_i-k_3)}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - k_1 - k_2)!}{(n_i - n - k_1 - k_2)!}$$

$$\frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(l_s - k_1 - k_2)!}{(l_s - j_{sa} - k_1 - k_2 + 1)! \cdot (j_s - 2)!}$$

$$\frac{(n - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > D - n - 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + j_{sa} - j_{sa} \leq j_i \leq n \wedge$$

$$l_i - j_{sa}^{ik} + j_{sa} \leq l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s = D - n - 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa}^{ik} - j_{sa} < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1)) \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \Rightarrow$$

$$fz S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_s-k+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{\binom{()}{j^{sa}=j_{ik}+l_{sa}-l_{ik}}} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{\binom{()}{n_i=j_s+1}} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{\binom{()}{n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2}} \sum_{n_s=n_{sa}+j_i-j_{ik}-k_3}$$

$$\frac{(n_i + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - s - k_1 - k_2)!}{(n_i - n - k_1 - k_2)!}$$

$$\frac{1}{(n + 2 \cdot j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_i - j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(l_s - k_1 - k_2)!}{(l_s - j_s - k_1 - k_2 + 1)! \cdot (j_s - 2)!}$$

$$\frac{(n - l_i)!}{(D) (j_i - n - l_i)! \cdot (n - j_i)!}$$

GÜLDÜMÜN

$$\begin{aligned}
 & ((D \geq n < n \wedge l_s \leq D - n + 1 \wedge \\
 & 1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\
 & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge \\
 & l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge \\
 & l_i > D + l_{sa} + s - n - j_{sa}) \vee
 \end{aligned}$$

$$\begin{aligned}
 & (D \geq n < n \wedge l_s \leq D - n + 1 \wedge \\
 & 1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\
 & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge \\
 & l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge \\
 & l_i > D + l_s + s - n - 1) \vee
 \end{aligned}$$

$$\begin{aligned}
 & (D \geq n < n \wedge l_s \leq D - n + 1 \wedge \\
 & 1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\
 & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge \\
 & l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge \\
 & l_{ik} > D + l_s + j_{sa}^{ik} - n - 1) \vee
 \end{aligned}$$

$$\begin{aligned}
 & (D \geq n < n \wedge l_s \leq D - n + 1 \wedge \\
 & 1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\
 & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge \\
 & l_i - s - 1 > l_s \wedge \\
 & l_i > D + l_s + s - n - 1) \wedge
 \end{aligned}$$

$$\begin{aligned}
 & ((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge \\
 & s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge \\
 & s \geq 1 \wedge s = s + \mathbb{k} \wedge
 \end{aligned}$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_1, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \Rightarrow$$

$$fz_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = 0$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$fz_{j_s, j_{ik}, j^{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+ \dots)}^{()} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa} \dots)}^{()} \sum_{(j_i=j_{sa}-j_{sa}^{ik}+ \dots)}^{()} \sum_{(n-D)}^{()} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{ik}+j_s-j_{ik}-\mathbb{k}_1)}^{(n_{ik}+1)} \sum_{(n_{sa}=n_{ik}+j_s-j_{sa}-\mathbb{k}_2)}^{()} \sum_{(n_{sa}+j_{sa}-j_i-\mathbb{k}_3)}^{()} \frac{(n_i + j_s + j_{sa} - j_{ik} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^s)!}{(n_i - \mathbb{k}_2 - \dots)! \cdot (n + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s = D - n - 1 \wedge$$

$$2 \leq j_{ik} - j_{sa}^{ik} + j_s + j_{sa} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_{sa} + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - k + 1 = l_s - j_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_1, j_{sa}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3)) \Rightarrow$$

$$fz_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{\binom{()}{j^{sa}=j_i+j_{sa}-s}} \sum_{l_{sa}+s-k-j_{sa}+1}^{j_i=l_{sa}+n+s-D-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{\binom{(n_i-j_s+1)}{n_{is}=n+\mathbb{k}-j_s+1}} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{\binom{()}{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}} \sum_{n_s=n_{sa}+j_s-j_i-\mathbb{k}_3}$$

$$\frac{\binom{(n_i+j_s+j_{sa}^{ik}-j_{ik}-s-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-n-\mathbb{k}_1-\mathbb{k}_2-\mathbb{k}_3)! \cdot (n+j_s+j_{sa}^{ik}-j_{ik}-j_{sa}^s)!}}{\frac{(l_s-\mathbb{k}-1)!}{(l_s-\mathbb{k}+1)! \cdot (j_s-2)!}} \cdot \frac{(D-j_s)!}{(D+j_s-n-l_i)! \cdot (n-j_i)!}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{ik}^{ik} \leq j_{ik} \leq j_s + j_{sa}^{ik} - j_{sa}^{ik} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} - j_{sa} - j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa}^{ik} = l_{ik} \wedge l_{sa} + j_{sa} - s = l_{sa} \wedge$

$((D > n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\}$

$s \geq 6 \wedge s = s + \mathbb{k}$

$\mathbb{k}_2: z = s \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_2: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + \mathbb{k} \wedge$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\}$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \vee$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j_{sa}=j_i+j_{sa}-s)}^{()} \sum_{j_i=l_{ik}+n+s-D-j_{sa}^{ik}}^{l_{ik}+s-k-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j_{sa}^{ik}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - l_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$f_z^{DSD} S_{j_s, j_{ik}, j_{sa}}^{DSD} = \sum_{k=1}^{D-1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=j} \sum_{j_{sa}^{ik}-j_{sa}}^{()} \sum_{(j_{sa}=j_i+j_{sa}-s)}^{()} \sum_{j_i=l_s+n+s-D-1}^{l_s+s-k}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j_{sa}^{ik}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^s)!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z^{S^{DSD}}_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{(j_s=j_{ik}+j_{sa}^{ik}+1)}^{D-n+1} \sum_{(l_{sa}=j_i+j_{sa}-s+1)}^{(j_s+1)} \sum_{(j_i=l_i+n-D)}^{(l_{sa}+1)} \sum_{(n_i=n+\mathbb{k})}^{(n+\mathbb{k}-j_s+1)} \sum_{(j_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{(n+\mathbb{k}-j_s+1)} \sum_{(n_s=n_{sa}+j_{sa}^{ik}-j_i-\mathbb{k}_3)}^{(n+\mathbb{k}-j_s+1)}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^s)!}{(n_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - j_s + 1 \wedge$$

$$2 \leq j_{ik} - j_{sa}^{ik} - 1 \leq j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} - \mathbb{k}_1 \leq j_{sa} \leq j_i + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$j_{sa}^{ik} - 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z^{SDSD} S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{()} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{()} \sum_{j_i=l_i+n-l}^{l_{ik}+s-k-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{ik}-k_1}^{()}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{(n_{sa}+j^{sa}-j_i)}^{()}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - k_1 - k_2 - k_3 - j_{sa}^s)!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (n_i + j_{sa}^{ik} - j_{sa}^s)! \cdot (j_s - k - 1)!}$$

$$\frac{(D - j_s - k + 1)! \cdot (j_s - 2)!}{(D - l_i)!}$$

$$\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \wedge j_i + j_{sa} - s \wedge j^{sa} - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_{sa} + j_{sa}^{ik} - j_{sa} \wedge l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D - n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_s, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$s \geq 6 \wedge n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_s, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k \wedge$

$k_z: z = 2 \wedge k = k_1 + k_3) \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k \wedge$

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$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 5 \wedge s = s + k \wedge$

$k_z: z = 1 \wedge k = k_1) \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 5 \wedge s = s + k \wedge$

$k_z: z = 1 \wedge k = k_2) \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

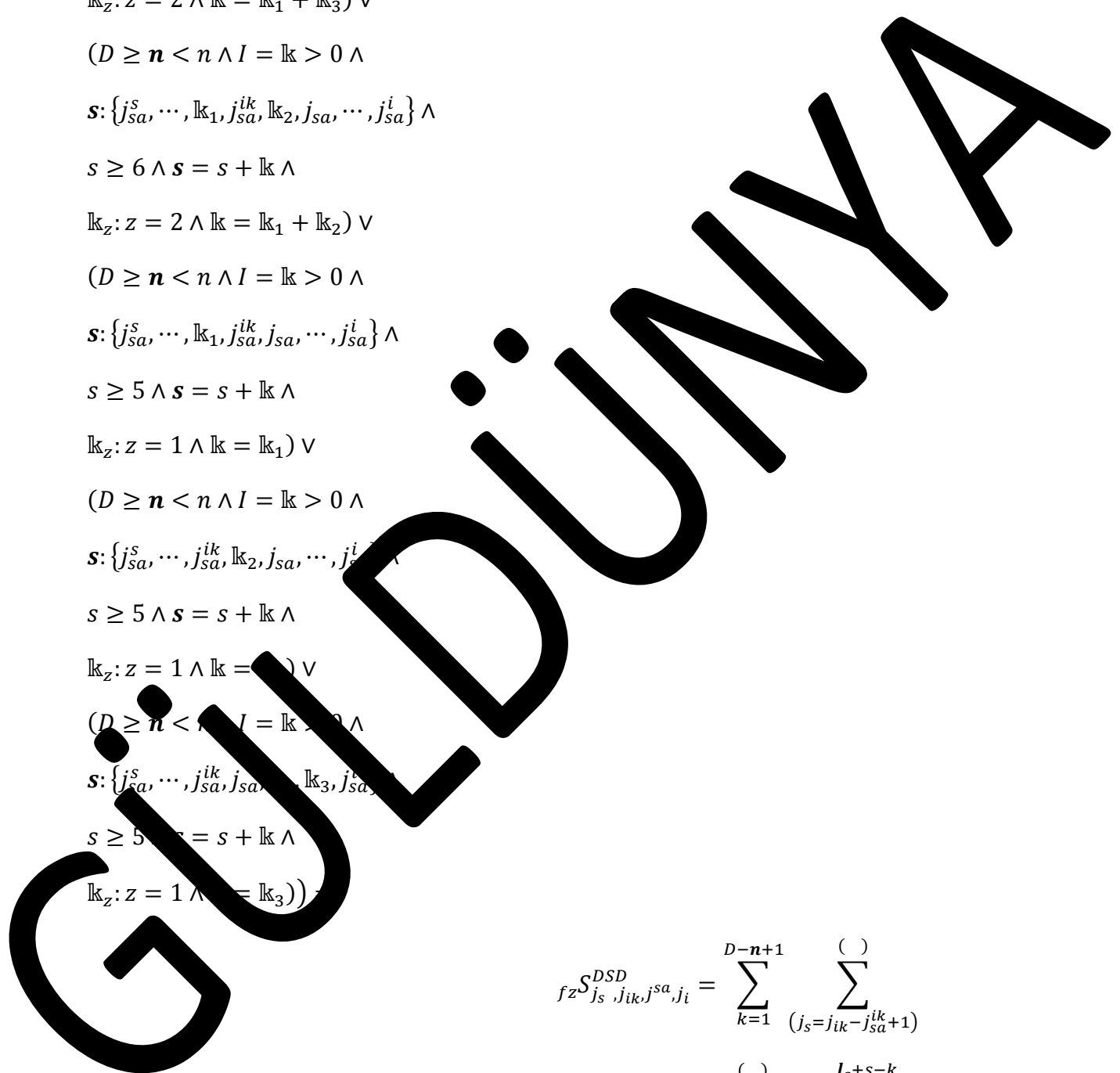
$s \geq 5 \wedge s = s + k \wedge$

$k_z: z = 1 \wedge k = k_3) \vee$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{()} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{()} \sum_{j_i=l_i+n-D}^{l_s+s-k}$$

$$\sum_{n_i=n+k}^n \sum_{(n_i=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}$$



$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - k_1 - k_2 - k_3 - j_{sa}^s)!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!}$$

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$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_{ik} < n$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - j_{ik} \wedge l_i + j_s - s = l_s \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \vee$$

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$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

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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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$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

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$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$f_z^{DSD} S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{i_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}^{()} \sum_{(j_{sa}=j_i+j_{sa}-s)}^{()} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_i-k+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_i=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j_{sa}^{ik}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

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$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

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$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

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$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

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$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$f_z^{S^{DSD}} j_s, j_{ik}, j_{sa}, j_i = \sum_{k=0}^{D-n+1} \sum_{j_s=j_{ik}-j_{sa}^{ik}+1}^{j_{ik}+1} \sum_{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}^{j_i+j_{sa}} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{j_{sa}^{ik}+1} \sum_{n_i=0}^n \sum_{(n_i=n_{is}+j_s+1)}^{(n_i+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}^{(n_i)} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3} \frac{(n_i + j_s - j_{sa} - j_{ik} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^s)!}{(n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

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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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$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

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$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$

$$fz_{j_s, j_{ik}, j^{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()} \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{()} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{()} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_s+s-k} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}-k-\mathbb{k}_1}^{(n_{sa}=n_{is}+j_{sa}-j_{sa})} \sum_{n_s=n_{ik}+j^{sa}-j_i-\mathbb{k}_3}^{(n_s=n_{ik}+j^{sa}-j_i-\mathbb{k}_3)} \frac{(n_i + j_{sa}^{ik} - j_{sa} - s - \mathbb{k}_2 + \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} = j^{sa} \leq j_i + j_{sa} - s = j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} = j_{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$((D \geq n < n \wedge I = \mathbb{k} > 0) \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{s-2}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 7 \wedge s = s + \mathbb{k} \wedge$

$(\mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + \mathbb{k} \wedge$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

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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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$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\}$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{()} \sum_{j_i=l_{ik}+n+s-D-j_{sa}^{ik}}^{l_i-k+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{(\)} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_2}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - k_1 - k_2 - k_3 - j_{sa}^s)!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k - 1)! \cdot (l_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - l_i - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} - j_{sa}^{ik} - j_{sa}$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j_i + s - j_{sa} \leq j_i - n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_i = l_{ik} \wedge l_{sa} - j_{sa} - s = l_i \wedge$

$((D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 7 \wedge s = s + k \wedge$

$k_2: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k \wedge$

$k_2: z = 2 \wedge k = k_2 + k_3) \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

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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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$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

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$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j_{sa}=j_i+j_{sa}-s)}^{()} \sum_{j_i=l_{ik}+n+s-D-j_{sa}^{ik}}^{l_{sa}+s-k-j_{sa}+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

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$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

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$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

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$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

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$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$j_{sa}^{DSD} = \sum_{k=1}^{l_s+1} \binom{l_s+1}{k} (j_s = j_{ik} - j_{sa}^{ik} + 1)$$

$$\sum_{j_{sa} = j_{sa} + j_s}^{j_{sa} + j_s} \binom{l_s + s - k}{j_{sa} = j_{sa} - s} j_i = l_{ik} + n + s - D - j_{sa}^{ik}$$

$$\sum_{n+l_k}^n \binom{n+l_k}{n_{is} = n+l_k - j_s + 1} n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)} \binom{l_s}{n_s = n_{sa} + j_{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^s)!}{n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

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$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

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$$(D \geq n < n \wedge I = k > 0 \wedge$$

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$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$fz_{j_s, j_{ik}, j^{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+ \dots)}^{()} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{()} \sum_{(j^{sa}=j_i+j_{sa})}^{()} \sum_{(l_i+n-k+1 \leq l_s \leq D-1)}^{()} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{ik}+j_s-j_{ik}-\mathbb{k}_1)}^{(n_{ik}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{(n_{sa}=n_{ik}-j^{sa}-\mathbb{k}_2)}^{(n_{sa}=n_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{(n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}^{(n_{sa}+j^{sa}-j_i-\mathbb{k}_3)} \frac{(n_i + j_s + j_{sa} - j_{ik} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^s)!}{(n_i - \mathbb{k}_2 - \dots)! \cdot (n + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!} \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s = D - n - 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + j_s + j_{sa} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_{sa} + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - k + 1 = l_s - j_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$(j_s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i) \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

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$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

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$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3)) \Rightarrow$$

$$f_z^{S^{DSD}}_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)} \sum_{l_{sa}+s-k-j_{sa}+1}^{()} j_i=l_s+n+s-D-1$$

$$\sum_{n_i=n+k}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}^{(n_i-j_s+1)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j_s-j_i-k_3}^{()}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - k_1 - k_2 - j_{sa}^{ik})!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (n + j_{sa}^{ik} - j_{ik} - j_{sa}^{ik})!} \cdot \frac{(l_s - k - 1)!}{(l_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - 1)!}{(D + j_{sa}^{ik} - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

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$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} - j_{sa} - j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa}^{ik} = l_{ik} \wedge l_{sa} - j_{sa} - s = l_{sa} \wedge$$

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$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\}$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \vee$$

$$fz S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j_{sa}=j_i+j_{sa}-s)}^{()} \sum_{j_i=l_s+n+s-D-1}^{l_{ik}+s-k-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j_{sa}^{ik}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - k_1 - k_2 - k_3 - j_{sa}^s)!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - l_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

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$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$f_z^{DSD} S_{j_s, j_{ik}, j_{sa}}^{DSD} = \sum_{k=1}^{D-1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=j_{sa}^{ik}-j_{sa}}^{()} \sum_{(j_{sa}=l_i+n+j_{sa}-D-s)}^{()} \sum_{j_i=j_{sa}^{ik}+s-j_{sa}}^{()}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j_{sa}^{ik}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

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$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

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$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

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$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

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$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

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$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{(j_s=j_{ik}+j_{sa}^{ik}+1)}^{D-n+1} \sum_{(j_s=j_{ik}+1)}^{()} \sum_{(j_s=j_{ik}+1)}^{()} \sum_{(n_i=n+\mathbb{k})}^{()} \sum_{(n_i=n+\mathbb{k}-j_s+1)}^{()} \sum_{(j_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{()} \sum_{(n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3)}^{()} \frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^s)!}{(n_i - j_s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - \dots + 1 \wedge$$

$$2 \leq j_{ik} - j_{sa}^{ik} - 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - \mathbb{k}_1 \leq j_{sa} \leq j_i + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$j_{sa} - j_{sa}^{ik} - 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

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$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz_{j_s, j_{ik}, j^{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(l_{ik}+j_{sa}-k-j_{sa}^{ik}+1)} \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(n_i-j_s+1)} \sum_{(j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik})} \sum_{j_i=j^{sa}+s-1}^{(n_{is}=n+l_k-j_s+1)} \sum_{n_{ik}=n_{is}+j_{ik}-l_{k_1}}^{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{(n_{sa}+j^{sa}-j_i)}^{(n_i+j_s+j_{sa}^{ik}-j_{ik}-s-l_{k_1}-l_{k_2}-l_{k_3}-l_{sa}^s)} \frac{(n_i+j_s+j_{sa}^{ik}-j_{ik}-s-l_{k_1}-l_{k_2}-l_{k_3}-l_{sa}^s)!}{(n_i-n-l_{k_1}-l_{k_2}-l_{k_3}-l_{sa}^s)! \cdot (n_{sa}+j^{sa}-j_i)!} \cdot \frac{(j_s-k-1)!}{(j_s-l_{k_1}-1)! \cdot (j_s-2)!} \cdot \frac{(D-l_i)!}{(D-l_i-j_i-n-l_i)! \cdot (n-j_i)!}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} + j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_{sa} + j_{sa}^{ik} - j_{sa} \wedge l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$((D \geq n < n \wedge I = l_{k_1} > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, l_{k_2}, j_{sa}, \dots, l_{k_3}, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + l_{k_1} \wedge$

$l_{k_z}: z = 3 \wedge l_{k_z} = l_{k_1} + l_{k_2} + l_{k_3}) \vee$

$(D \geq n < n \wedge I = l_{k_1} > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, l_{k_2}, j_{sa}, \dots, l_{k_3}, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + l_{k_1} \wedge$

$l_{k_z}: z = 2 \wedge l_{k_z} = l_{k_2} + l_{k_3}) \vee$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

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$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \vee$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}^{(l_s+j_{sa}-k)} \sum_{(j_{sa}=l_s+n+j_{sa}-D-1)} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_i=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - k_1 - k_2 - k_3 - j_{sa}^s)!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

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$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_{ik} < n$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - j_{ik} \wedge l_i + j_{sa} - s = l_s \wedge$

$((D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j^i\} \wedge$

$s \geq 7 \wedge s = s + k \wedge$

$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k$

$k_z: z = 2 \wedge k = k_2 + k_3 \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k \wedge$

$k_z: z = 2 \wedge k = k_1 + k_3 \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

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$s \geq 6 \wedge s = s + k \wedge$

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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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$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

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$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z^{DSD} S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{i_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}^{(l_{sa}-k+1)} \sum_{(j_{sa}=l_i+n+j_{sa}-D-s)} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j_{sa}^{ik}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

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$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z^{S^{DSD}}_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=0}^{D-n+1} \sum_{j_s=j_{ik}-j_{sa}^{ik}+1}^{(l_{ik}-j_{sa}-k-j_{sa})} \sum_{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}^{(l_{ik}-j_{sa}-k-j_{sa})} \sum_{j_i=j_{sa}+s-j_{sa}}^{(n_i+n+j_{sa}-D-s)} \sum_{n_i=0}^n \sum_{n_{is}=n_i-j_{sa}+1}^{(n_i+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3} \frac{(n_i + j_s - j_{sa} - j_{ik} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^s)!}{(n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$l_k: z = 1 \wedge l_k = l_{k_3}) \Rightarrow$$

$$f_z^{SDSD} j_s, j_{ik}, j^{sa}, j_i = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(l_s+j_{sa}-k)} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)}^{(n_i-j_s+1)} \sum_{(n_i=n+l_k)}^{(n_{is}=n+l_k-j_s+1)} \sum_{(n_{ik}=n+l_k-j_s+1)}^{(n_{ik}=n+l_k-j_s+1)} \sum_{(n_{sa}=n+l_k-j_s+1)}^{(n_s=n+l_k-j_s+1)} \sum_{(n_s=n+l_k-j_s+1)}^{(n_s=n+l_k-j_s+1)} \frac{(n_i + j_{sa}^{ik} - j_{ik} - s - l_{k_1} - l_{k_2} - l_{k_3})!}{(n_i - n - l_{k_1} - l_{k_2} - l_{k_3})! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_i \leq j_{sa} - s + j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$(D \geq n < n \wedge I = l_k > 0) \wedge$$

$$s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{s-2}, j_{sa}, \dots, l_{k_3}, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + l_k \wedge$$

$$(l_k = l_{k_1} + l_{k_2} + l_{k_3}) \vee$$

$$(D \geq n < n \wedge I = l_k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, l_{k_2}, j_{sa}, \dots, l_{k_3}, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + l_k \wedge$$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 5 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\}$

$s \geq 5 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

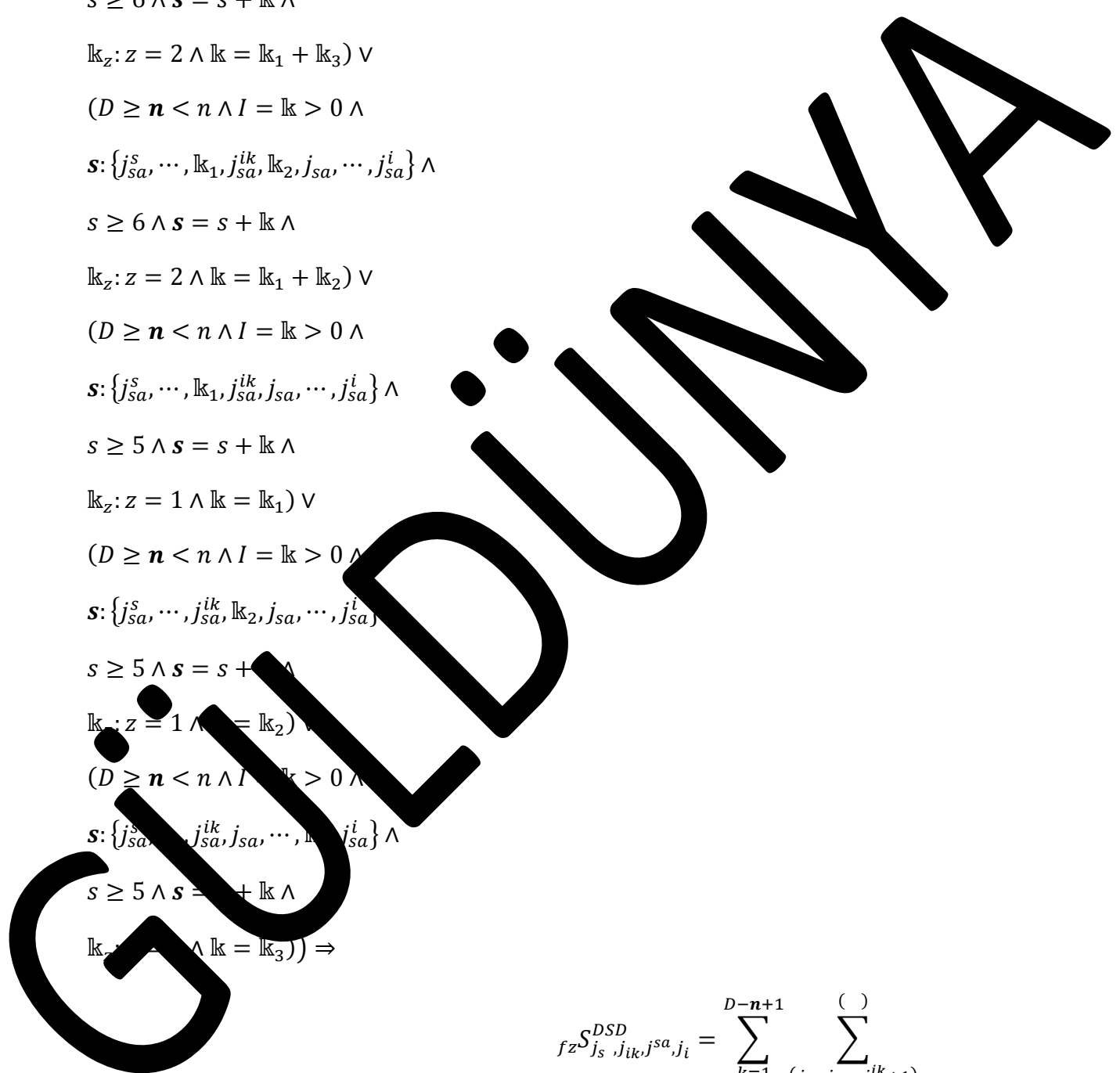
$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 5 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_i+j_{sa}-k-s+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$



$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{(\)} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_2}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - k_1 - k_2 - k_3 - j_{sa}^s)!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k - 1)! \cdot (l_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - l_i - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} - j_{sa}^{ik} - j_{sa}$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j_i + s - j_{sa} \leq j_i < n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_i = l_{ik} \wedge l_{sa} - j_{sa} - s = l_i \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_2: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_2: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

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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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$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=j_{sa}^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j_{sa}=l_{sa}+n-D)}^{(l_{ik}+j_{sa}-k-j_{sa}^{ik}+1)} \sum_{j_i=j_{sa}^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j_{sa}-j_i-k_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - k_1 - k_2 - k_3 - j_{sa}^s)!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

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$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$j_{sa}^{DSD} = \sum_{k=1}^{l_s+1} \binom{l_s+1}{j_s=j_{ik}-j_{sa}^{ik}+1}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+j_{sa}-j_{sa}}^{l_s+j_{sa}-j_{sa}} \sum_{j_i=l_{sa}+n-D}^{l_s+j_{sa}-j_{sa}} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\sum_{n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_{is}=n+l_k-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-k_2)}^{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-k_2)} \sum_{n_s=n_{sa}+j_{sa}-j_i-k_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - k_1 - k_2 - k_3 - j_{sa}^s)!}{n_i - n - k_1 - k_2 - k_3)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

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$$(D \geq n < n \wedge I = k > 0 \wedge$$

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$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

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$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$fz_{j_s, j_{ik}, j^{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+ \dots)}^{()} \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(l_i+j_{sa}-k-s+1)} \sum_{(j^{sa}=l_{ik}+n+j_{sa}-D)}^{(n_i-j_s+1)} \sum_{(n_i=n+\mathbb{k}_1)}^{(n_i-j_s+1)} \sum_{(n_{sa}=n_{ik}+j_{sa}-\mathbb{k}_2)}^{(n_{sa}+j_{sa}-j_i-\mathbb{k}_3)} \frac{(n_i + j_s + j_{sa} - j_{ik} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^s)!}{(n_i - \mathbb{k}_2 - \dots)! \cdot (n + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s = D - n - 1 \wedge$$

$$2 \leq j_{ik} - j_{sa}^{ik} + j_s + j_{sa} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_{sa} + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - \mathbb{k}_1 + 1 = l_s - j_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_1, j_{sa}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3)) \Rightarrow$$

$$fz_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(l_{sa}-k+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{(\)} \sum_{n_s=n_{sa}+j_s-j_i-k_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - k_1 - k_2 - j_{sa}^i)!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - j_{sa}^i)!}$$

$$\frac{(l_s - k + 1)!}{(l_s - k + 1) \cdot (j_s - 2)!}$$

$$\frac{(D - n - l_i)! \cdot (n - j_i)!}{(D + j_s - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{ik}^{ik} \leq j_{ik} \leq j_s + j_{sa}^{ik} - j_{sa}^i \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_{sa}^{ik} - s \wedge j^{sa} - j_{sa} \leq j_s \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa}^i = l_{ik} \wedge l_{sa} + j_{sa} - s = l_{sa} \wedge$

$((D > n < n \wedge l_s > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\}$

$s \geq 6 \wedge s = s + k$

$k_2: z = 2 \wedge k = k_1 + k_2 + k_3) \vee$

$(D \geq n < n \wedge l_s = 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k \wedge$

$k_2: z = 2 \wedge k = k_2 + k_3) \vee$

$(D \geq n < n \wedge l_s = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k \wedge$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\}$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \vee$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(l_s+j_{sa}-k)}^{()} \sum_{(j_{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik})} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_i-j_s+1)}^{()} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j_{sa}-j_i-k_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - k_1 - k_2 - k_3 - j_{sa}^s)!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - l_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \Rightarrow$$

$$f_z^{DSD} S_{j_s, j_{ik}, j_{sa}}^{DSD} = \sum_{k=1}^{D-1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(j_s=j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_{ik}=j_{sa}^{ik}-j_{sa})}^{(j_{ik}=j_{sa}^{ik}-j_{sa})} \sum_{(j_{sa}^{ik}=l_s+n+j_{sa}^{ik}-D-1)}^{(j_{sa}^{ik}=l_s+n+j_{sa}^{ik}-D-1)} \sum_{(j_i=j_{sa}^{ik}+s-j_{sa})}^{(j_i=j_{sa}^{ik}+s-j_{sa})} \sum_{(n_i=n+k)}^{(n_i=n+k)} \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-k_1)}^{(n_i-j_s+1)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-k_2)}^{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-k_2)} \sum_{(n_s=n_{sa}+j_{sa}^{ik}-j_i-k_3)}^{(n_s=n_{sa}+j_{sa}^{ik}-j_i-k_3)}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - k_1 - k_2 - k_3 - j_{sa}^s)!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z^{S^{DSD}}_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{(j_s=j_{ik}+j_{sa}^{ik}+1)}^{D-n+1} \sum_{(l_{sa}=j_{sa}^{ik}+1)}^{()} \sum_{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}^{(l_{sa}-1)} \sum_{(n+j_{sa}-D)}^{(n+j_{sa}-D-1)} \sum_{(i=j_{sa}+s-j_{sa})}^{()} \sum_{(n_i=n+\mathbb{k})}^{(n+\mathbb{k}-j_s+1)} \sum_{(n_i=n+\mathbb{k}-j_s)}^{(n+\mathbb{k}-j_s+1)} \sum_{(j_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{()} \sum_{(n_i=n_{ik}+j_{sa}-\mathbb{k}_2)}^{()} \sum_{(n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3)}^{()} \frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^s)!}{(n_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - \dots + 1 \wedge$$

$$2 \leq j_{ik} - j_{sa}^{ik} \leq j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$j_{sa} - j_{sa}^{ik} - 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(l_{ik}+j_{sa}-k-j_{sa}^{ik}+1)} \sum_{(j^{sa}=l_s+n+j_{sa}-D-1)} \sum_{j_i=j^{sa}+s-1}^{(n_i-j_s+1)} \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_{ik}=n_{is}+j_{ik}-l_{k1})} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k2})}^{(n_{sa}=n_{sa}+j^{sa}-j_i)} \frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - l_{k1} - l_{k2} + j_{sa}^s)!}{(n_i - n - l_{k1} - l_{k2} - j_s - j_{sa}^{ik} + 1)! \cdot (n_{ik} + j_{ik} - j^{sa} - l_{k1} - l_{k2} - j_s - j_{sa}^{ik} + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq l_{ik} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \wedge j_i + j_{sa} - s \wedge j^{sa} - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_{sa} + j_{sa}^{ik} - j_{sa} \wedge l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D - n < n \wedge I = l_{k1} = 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, l_{k2}, j_{sa}, \dots, l_{k3}, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + l_{k1} \wedge$$

$$l_{kz}: z = 3 \wedge l_{kz} = l_{k1} + l_{k2} + l_{k3}) \vee$$

$$(D - n < n \wedge I = l_{k1} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, l_{k2}, j_{sa}, \dots, l_{k3}, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + l_{k1} \wedge$$

$$l_{kz}: z = 2 \wedge l_{kz} = l_{k2} + l_{k3}) \vee$$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 5 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 5 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \dots) \vee$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

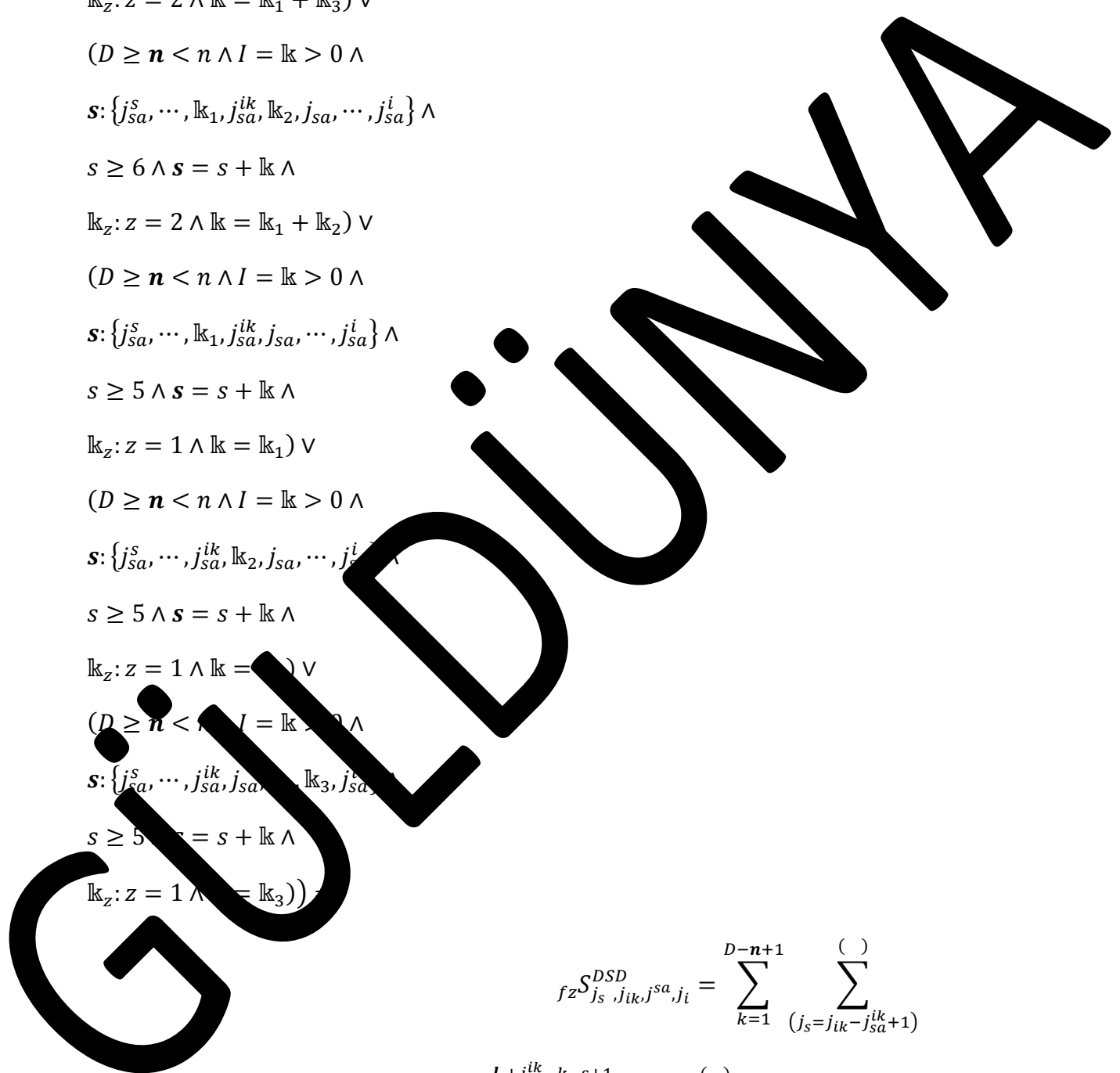
$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 5 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 1 \wedge \dots = \mathbb{k}_3)) \vee$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_i+j_{sa}^{ik}-k-s+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j^{sa}+s-j_{sa}}$$



$$\sum_{n_i=n+k}^n \sum_{(n_{i_s}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{i_s}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{(\quad)} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_2}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - k_1 - k_2 - k_3 - j_{sa}^s)!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k - 1)! \cdot (l_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - l_i - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} - j_{sa}^{ik} - j_{sa}$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j_i + s - j_{sa} \leq j_i < n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_i = l_{ik} \wedge l_{sa} - j_{sa} - s = l_i \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_2: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

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$$s \geq 5 \wedge s = s + k \wedge$$

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$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

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$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa}}^{l_{sa}+j_{sa}^{ik}-k-j_{sa}+1} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j_{sa}-j_i-k_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - k_1 - k_2 - k_3 - j_{sa}^s)!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

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$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

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$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

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$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

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$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

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$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$j_{sa}^{DSD} = \sum_{k=1}^{l_{ik}-k+1} \binom{l_{ik}-k+1}{j_s=j_{ik}-j_{sa}^{ik}+1}$$

$$\sum_{j_{ik}^{l_{ik}-k+1}} \binom{l_{ik}-k+1}{j_{sa}^{n-D} (j_{sa}^{n-D} + j_{sa} - j_{sa}^{ik})} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\sum_{n+l_k} \binom{n+l_k}{n_{is}=n+l_k-j_s+1} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-k_2)} \binom{n_{sa}=n_{ik}+j_{ik}-j_{sa}-k_2}{n_s=n_{sa}+j_{sa}-j_i-k_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - k_1 - k_2 - k_3 - j_{sa}^s)!}{n_i - n - k_1 - k_2 - k_3)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

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$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$fz_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+ \dots)}$$

$$\sum_{j_{ik}=l_s+n+j_{sa}^{ik}-D-1}^{l_s+j_{sa}^{ik}-k} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}-j_{sa}^s-j_{sa})}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n_i+j_s-j_{ik}-\mathbb{k}_1)}$$

$$\sum_{(n_{sa}=n_{ik}-j_{sa}-\mathbb{k}_2)}^{(n_{sa}=n_{ik}-j_{sa}-\mathbb{k}_2)} \sum_{(n_{sa}+j_{sa}-j_i-\mathbb{k}_3)}$$

$$\frac{(n_i + j_s + j_{sa} - j_{ik} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^s)!}{(n_i - \mathbb{k}_2 - \dots)! \cdot (n_i + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s = D - n \wedge$$

$$2 \leq j_{sa} \leq j_{ik} - j_{sa}^{ik} + j_{sa} + j_{sa} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq j_{sa} + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} + 1 = l_s + l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n) \wedge I = \mathbb{k} > 0 \wedge$$

$$\{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

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$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

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$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_{sa}+j_{sa}^{ik}-k-j_{sa}+1} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-k_2)} \sum_{(n_s=n_{sa}+j_{sa}-j_i-k_3)}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - k_1 - k_2 - j_{sa}^{ik})!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^{ik})!}$$

$$\frac{(l_s - k_1 - 1)!}{(l_s - k_1 + 1) \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)}{(D + j_s - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq j_{ik} + j_{sa} - s \wedge j_{sa} + j_{sa}^{ik} - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_{sa} + j_{sa} - s = l_{sa} \wedge$

$((D - l_i) < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\}$

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$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

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$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

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$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\}$$

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$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_{ik}-k+1} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j_{sa}-j_i-k_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - k_1 - k_2 - k_3 - j_{sa}^s)!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - l_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

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$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$f_z^{DSD} S_{j_s, j_{ik}, j_{sa}}^{DSD} = \sum_{k=1}^{D-1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=l_i+n}^{j_{sa}^{ik}-k} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-\mathbb{k}_2)}^{()}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^s)!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

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$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{(j_s=j_{ik}+j_{sa}^{ik}+1)}^{D-n+1} \sum_{(n_i=n+\mathbb{k})}^{(n_i+j_s+j_{sa}^{ik}-j_{ik}-s-\mathbb{k}_1-\mathbb{k}_2-\mathbb{k}_3-j_{sa}^s)!} \sum_{(n_s=n_{sa}+j_{sa}^{sa}-j_i-\mathbb{k}_3)}^{(n_s=n+\mathbb{k})} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa}-j_{sa}^{sa})}^{l_i+j_{sa}^{ik}-k-s+1} \sum_{(j_{ik}=n_{sa}+j_{sa}^{ik}-D-j_{sa}-j_{sa}^{sa})} \sum_{(n_i=n+\mathbb{k})}^{(n_i+j_s+j_{sa}^{ik}-j_{ik}-s-\mathbb{k}_1-\mathbb{k}_2-\mathbb{k}_3-j_{sa}^s)!} \sum_{(n_s=n_{sa}+j_{sa}^{sa}-j_i-\mathbb{k}_3)}^{(n_s=n+\mathbb{k})} \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$2 \leq j_{ik} - j_{sa} - 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - 1 \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$j_{ik} - 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

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$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

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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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$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

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$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z^{DSD} S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()} \sum_{l_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa}}^{l_{ik}-k+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j^{sa}+s-j_{sa}^{ik}}^{()} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{ik}-k_1}^{(n_i-j_s+1)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{n_{sa}=n_{sa}+j^{sa}-j_i}^{(n_i-j_s+1)} \frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - k_2 - k_3 - j_{sa}^s)!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (n_i + j_{sa} - j_{sa}^s)!} \cdot \frac{(n_i - j_s - k_1 - k_2 - k_3 - k - 1)!}{(n_i - j_s - k_1 - k_2 - k_3 - 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n \wedge I = k > 0 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \wedge j_i + j_{sa} - s \wedge j^{sa} - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_{sa} + j_{sa}^{ik} - j_{sa} \wedge l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D - n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

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$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

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$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

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$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

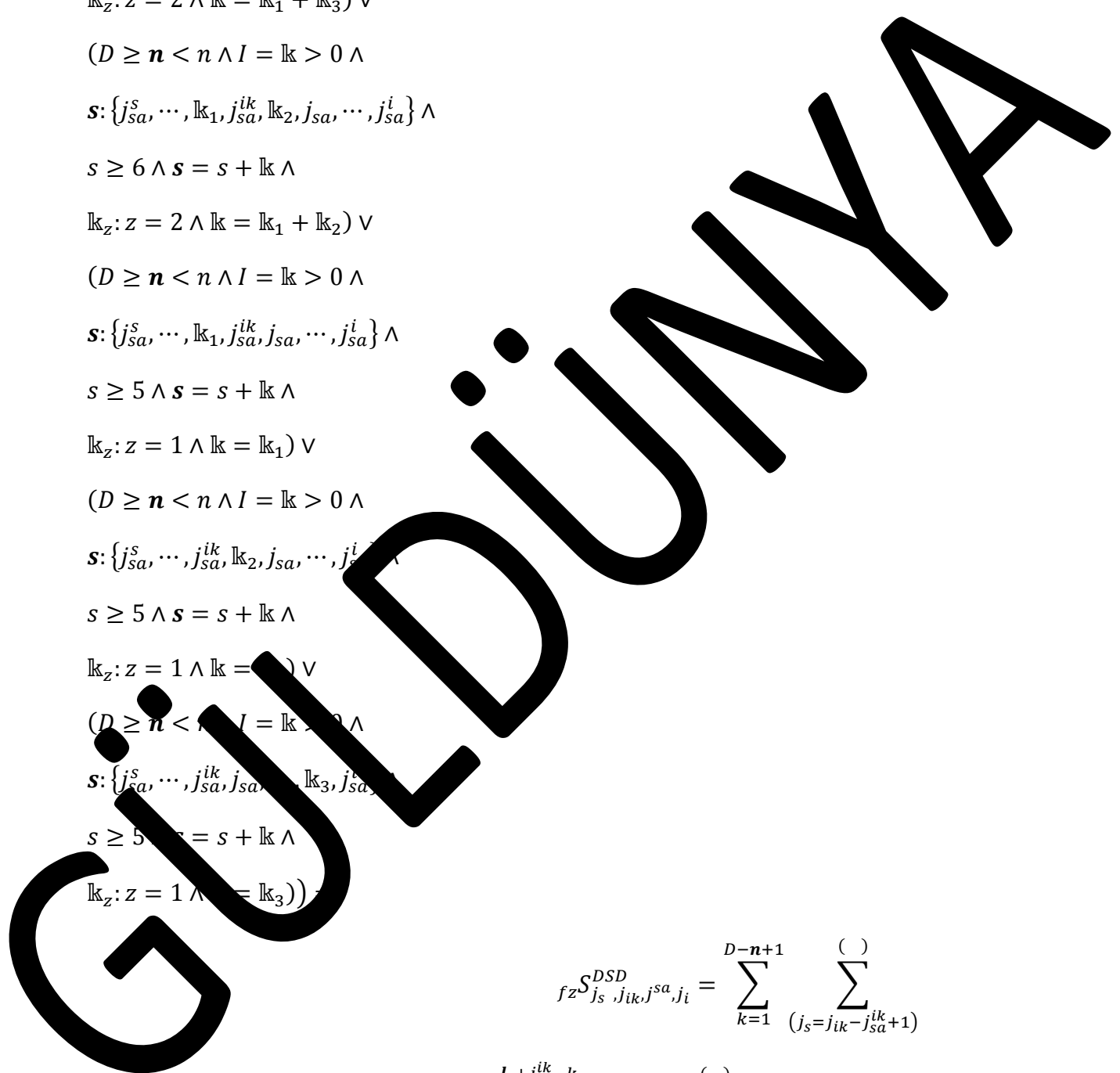
$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

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$$f_z S_{j_s, j_{ik}, j^{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=l_s+n+j_{sa}^{ik}-D-j_{sa}}^{l_s+j_{sa}^{ik}-k} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j^{sa}+s-j_{sa}}$$



$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{(\)} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_2}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - k_1 - k_2 - k_3 - j_{sa}^s)!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k - 1)! \cdot (l_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - l_i - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

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$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j_i + s - j_{sa} \leq j_i < n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_i = l_{ik} \wedge l_{sa} - j_{sa} - s = l_{sa} \wedge$$

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$$\sum_{j_{ik}=l_{ik}+n-D}^{l_i+j_{sa}^{ik}-k-s+1} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j_{sa}-j_i-k_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - k_1 - k_2 - k_3 - j_{sa}^s)!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

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$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

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$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$j_{sa}^{DSD} = \sum_{k=1}^{j_{sa}^{ik} - j_{sa}^{s+1}} (j_s = j_{ik} - j_{sa}^{ik} + 1)$$

$$\sum_{j_{ik} = l_{ik} - D}^{j_{sa}^{ik} - k - j_{sa} + 1} \sum_{(j_{sa} - k + j_{sa} - j_{sa}^{ik})} \sum_{j_i = j_{sa} + s - j_{sa}}$$

$$\sum_{n+k}^{n} \sum_{(n_{is} = n+k - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)} \sum_{n_s = n_{sa} + j_{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^s)!}{n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

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$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$fz_{j_s, j_{ik}, j^{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+ \dots)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_s+j_{sa}^{ik}-k} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}-j_{sa}^s-j_{sa})}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n_i+j_s-j_{ik}-\mathbb{k}_1)}$$

$$\sum_{(n_{sa}=n_{ik}-j^{sa}-\mathbb{k}_2)}^{(n_{sa}=n_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{(n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^s)!}{(n_i - \mathbb{k}_2 - \dots)! \cdot (n_i + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s = D - n \wedge$$

$$2 \leq j_{sa} \leq j_{ik} - j_{sa}^{ik} + j_{sa} + j_{sa} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_{sa} + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} + 1 = l_s + l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n) \wedge I = \mathbb{k} > 0 \wedge$$

$$\{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3)) \Rightarrow$$

$$fz_{j_s, j_{ik}, j^{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=l_s+n+j_{sa}^{ik}-D-1}^{l_i+j_{sa}^{ik}-k-s+1} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-k_2)} \sum_{(n_s=n_{sa}+j_{sa}-j_i-k_3)}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - k_1 - k_2 - j_{sa}^{ik})!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - k_1 - k_2 - j_{sa}^{ik})!}$$

$$\frac{(l_s - k_1 - 1)!}{(l_s - k_1 + 1) \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - j_{ik} \leq j_{sa}^{ik} + j_{sa}^{ik} - j_{sa}^{ik} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq j_{ik} + j_{sa} - s \wedge j_{sa} + j_{sa} - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa}^{ik} = l_{ik} \wedge l_{sa} + j_{sa} - s = l_{sa} \wedge$

$((D \geq n < n \wedge l_s > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\}$

$s \geq 6 \wedge s = s + k \wedge$

$k_z: z = 2 \wedge k = k_1 + k_2 + k_3) \vee$

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$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k \wedge$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\}$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \vee$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=l_s+n+j_{sa}^{ik}-D-1}^{l_{sa}+j_{sa}^{ik}-k-j_{sa}+1} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_i=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - l_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

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$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$f_z^{DSD} S_{j_s, j_{ik}, j_{sa}}^{DSD} = \sum_{k=1}^{D-1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=l_s+n}^{-k+1} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j_{sa}^i+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

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$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

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$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z^{S_{DSD}} j_s, j_{ik}, j_{sa}, j_i = \sum_{k=0}^{D-n+1} \sum_{(i_1=l_i+n-k-s+1)}^{(l_i-l_s+2)} \sum_{j_{ik}=j_s+j_{sa}^{lk}} \sum_{j_{ik}=j_{sa}-j_s}^{(j_{ik}+1)} \sum_{j_i=j_{sa}+s-j_{sa}} \sum_{n_i=n+k}^{(n+k-j_s)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3} \frac{(n_i + j_s + j_{sa}^{lk} - j_{ik} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^s)!}{(n_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$s \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_{ik} - j_{sa}^{lk} \leq j_{sa} + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$j_{sa} - j_{sa}^{ik} = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\}$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_{sa}-k-j_{sa}+2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j_{sa}+s-j_{sa}^s}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-k_2)} \sum_{(n_s=n_{sa}+j_{sa}^s-j_i)}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - k_2 - k_3 - j_{sa}^s)!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (n_i + j_s + j_{sa}^{ik} - j_{ik} - k_2 - k_3 - j_{sa}^s)!} \cdot \frac{(l_i - k - 1)!}{(l_i - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n - 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq l_i + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa}^s \leq j_i \leq j_i + j_{sa} - s \wedge j_{sa}^{ik} - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_{sa} + j_{sa}^{ik} - j_{sa} \wedge l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D - n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \vee$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - k_1 - k_2 - k_3 - j_{sa}^s)!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_{ik} < n$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - j_{ik} \wedge l_i + j_s - s = l_s \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_s^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_s^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3 \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_s^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3 \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_s^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$fz_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$s \geq 5 \wedge s = s + k \wedge$

$k_z: z = 1 \wedge k = k_2) \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 5 \wedge s = s + k \wedge$

$k_z: z = 1 \wedge k = k_3)) \Rightarrow$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{i=1}^{D-n+1} \sum_{j_s=l_i+n}^{(l_{sa}-k_{sa}+2)} \sum_{j_{ik}=j_{sa}-1}^{(j_{sa}-j_{ik}+j_{sa}-j_{sa})} \sum_{j_{sa}=j_{sa}-j_i}^{(j_{sa}-j_{sa})} \sum_{n_i=n+k}^n \sum_{n_{is}=n_{is}-j_s+1}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-k_2)}^{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-k_2)} \sum_{n_s=n_{sa}+j_{sa}-j_i-k_3}^{(n_s=n_{sa}+j_{sa}-j_i-k_3)} \frac{(n_i+n_{is}+j_s+j_{sa}^{ik}-j_{ik}-s-k_1-k_2-k_3-j_{sa}^s)!}{(n_i-n-k_1-k_2-k_3)! \cdot (n+j_s+j_{sa}^{ik}-j_{ik}-s-j_{sa}^s)!} \cdot \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!}$$

$D \geq n < n \wedge I = k > 0 \wedge$

$2 \leq j_s \leq j_{sa} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{sa} + j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$((D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \Rightarrow$$

$$f_z^{S_{DSD}}_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{lk}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+s-j_{sa}^{ik}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{(n_{sa}=n_{sa}+j^{sa}-j_i)}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - k_2 - k_3 - j_{sa}^s)!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (n_{is} + j_{sa} - j_{sa}^s)!} \cdot \frac{(n_{ik} - k - 1)!}{(n_{is} - j_s - k_1 + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n \wedge l_s > 0$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{lk} - 1 \leq j_{ik} \leq j_s + j_{sa}^a + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_s \wedge j_i + j_{sa} - s \wedge j_{sa} - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_{sa} + j_{sa}^{ik} - j_{sa} \wedge l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D - n < n \wedge l_s > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$D > n < n \wedge l_s > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \vee$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - k_1 - k_2 - k_3 - j_{sa}^s)!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - l_i)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} - s - j_{sa} \leq j_s < n$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - j_{ik} \wedge l_i + j_s - s = l_s \wedge$

$((D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_s^i\} \wedge$

$s \geq 7 \wedge s = s + k \wedge$

$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k$

$k_z: z = 2 \wedge k = k_2 + k_3 \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k \wedge$

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$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k \wedge$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_{z, \mathbf{s}}^{DSD, j_{ik}, j_{sa}, j_i} = \sum_{k=1}^{n+1} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_i-k-s+2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = \mathbf{s} + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = \mathbf{s} + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=0}^{D-n+1} \sum_{(j_s=l_{sa}+n-D-k+1)}^{(l_{ik}-k+2)} \sum_{j_{ik}=j_{sa}-1}^{(j_{sa}-j_{ik}+j_{sa}-j_{sa})} \sum_{j_{sa}=j_{sa}-j_{sa}}^{(j_{sa}-j_{sa})} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n_{is}+j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(n_i-j_s+1)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}^{(n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3)} \frac{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s = \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{sa} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

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$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_s-k+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{()} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j_{sa}+s-j_{sa}^{ik}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-k_2)}^{()} \sum_{(n_s=n_{sa}+j_{sa}^{ik}-j_i)}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - k_2 - k_3 - j_{sa}^s)!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (n_i + j_s + j_{sa}^{ik} - j_{ik} - k_2 - k_3 - j_{sa}^s)!} \cdot \frac{(l_s - k - 1)!}{(j_s - k_1 + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n - 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa} \leq j_{sa} \leq j_i + j_{sa} - s \wedge j_{sa} - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_{sa} + j_{sa}^{ik} - j_{sa} \wedge l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D - n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

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$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

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$$s \geq 5 \wedge s = s + k \wedge$$

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$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \vee$$

$$fz S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_i-k-s+2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - k_1 - k_2 - k_3 - j_{sa}^s)!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

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$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_{ik} < n$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - j_{ik} \wedge l_i + j_{sa} - s = l_s \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \vee$$

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$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3 \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3 \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_{j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{n+1} \sum_{(j_s = l_{ik} + n - D - j_{sa}^{ik} + 1)}^{(l_{sa} - k - j_{sa} + 2)}$$

$$\sum_{j_{ik} = j_s + j_{sa}^{ik} - 1} \sum_{(j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})} \sum_{j_i = j_{sa} + s - j_{sa}}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)}^{()} \sum_{n_s = n_{sa} + j_{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D-1} \sum_{(j_s + n - D - j_{sa}^{ik} + 1)}^{(l_s)} \sum_{(j_{ik} = j_s + j_{sa}^{ik} - j_{sa}^{ik})}^{(j_{sa} = j_{ik} + j_{sa}^{ik} - j_{sa}^{ik})} \sum_{(j_i = j_{sa} + s - j_{sa})}^{(n)} \sum_{(n_{is} = n_{is} + j_s + 1)}^{(n_{is} + 1)} \sum_{(n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1)}^{(n_{ik} + 1)} \sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)}^{(n_{sa} + 1)} \sum_{(n_s = n_{sa} + j_{sa} - j_i - \mathbb{k}_3)}^{(n_s + 1)}$$

$$\frac{(n_i + j_s + j_{sa} - j_{ik} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^s)!}{(n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$

$$f_z^{S^{DSD}}_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_i-k-s+2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{(j_i=j^{sa}+s-j_{sa})}^{()}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{is}+j_s+\mathbb{k}-\mathbb{k}_1)}^{()}$$

$$\sum_{(n_{sa}=n_{is}+\mathbb{k}_2)}^{()} \sum_{(n_s=n_{is}+j^{sa}-j_i-\mathbb{k}_3)}^{()}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_i - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s + j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s \geq D - n + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_i \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} - j_{sa} \leq j_i \leq j_{sa} - s - j_{sa}^{sa} + s - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$(D \geq n < n \wedge l = \mathbb{k} > 0) \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 7 \wedge s = s + \mathbb{k} \wedge$

$(z = 1 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$

$(D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + \mathbb{k} \wedge$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\}$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$f_z^{DSD} S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=1}^{D-n+1} \sum_{(j_s = l_s + n - D)}^{(l_{sa} - k - j_{sa} + 2)}$$

$$\sum_{j_{ik} = j_s + j_{sa}^{ik} - 1} \sum_{(j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})} \sum_{j_i = j_{sa} + s - j_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{(\)} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_2}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - k_1 - k_2 - k_3 - j_{sa}^s)!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k - 1)! \cdot (l_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - l_i - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} - j_{sa}^{ik} - j_{sa}$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j_i + s - j_{sa} \leq j_i < n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_i = l_{ik} \wedge l_{sa} - j_{sa} - s = l_i \wedge$

$((D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 7 \wedge s = s + k \wedge$

$k_2: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k \wedge$

$k_2: z = 2 \wedge k = k_2 + k_3) \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k \wedge$

$k_2: z = 2 \wedge k = k_1 + k_3) \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$f_z^{SDSD} j_s, j_{ik}, j_{sa}, j_i = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_{ik}-k-j_{sa}^{ik}+2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D + s - n < l_i \leq D + l_s + s - n - 1))$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + (\mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z \mathcal{S}_{j_{ik}, j_{sa}, j_i} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j_{sa}=j_i+j_{sa}-s)}^{()} \sum_{j_i=l_i+n-D}^{l_{sa}+s-k-j_{sa}+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^s)!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

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$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

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$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

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$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

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$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 5 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$

$$fz S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{sa}-j_{sa}^{ik}+1)}^{()} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})}^{()} \sum_{(j_i=l_i+n)}^{()} \sum_{(n_i=n_{sa}+j_{sa}^{ik}-j_{sa}-\mathbb{k}_2)}^{()} \sum_{(n_s=n_{sa}+j_{sa}^{ik}-j_{sa}-\mathbb{k}_3)}^{()} \frac{(n_i + j_s - j_{sa}^{ik} - j_{sa} - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^s)!}{(n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$((D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$

$(n \wedge l_s > D - n + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

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$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

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$$l_i - s + 1 > l_s \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

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$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

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$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}}^{DSD} = \sum_{k=1}^{D+s-n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{(j_{ik}=j_{sa}+j_{sa}-j_{sa})} \sum_{(j_{sa}=j_i+j_{sa}-s)} \sum_{(j_i=l_i+n-D)}^{l_s+s-k}$$

$$\sum_{n_i=n+\mathbb{k}}^{n} \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

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$$D + s - n < l_i \leq D + l_s + s - n - 1)) \wedge$$

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$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz_{j_s, j_{sa}, j_i}^{SD} = \sum_{l_i=1}^{n-l_i} \binom{n-l_i}{j_s=j_{ik}-j_{sa}^{ik}+1}$$

$$\sum_{j_s=j_{sa}+j_s}^{n-l_i} \sum_{j_{sa}=l_i}^{n-l_i-j_s+1} \sum_{j_i=j_{sa}+s-j_{sa}}^{n-l_i-j_s+1}$$

$$\sum_{n+l_k}^{n+l_k} \sum_{(n_{is}=n+l_k-j_s+1)}^{n-l_i-j_s+1} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-k_2)}^{n-l_i-j_s+1} \sum_{n_s=n_{sa}+j_{sa}-j_i-k_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^s)!}{n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

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$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$(D + s - n < l_i \leq D + l_s + s - n - 1)) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$(D + s - n < l_i \leq D + l_s + s - n - 1)) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$(D + s - n < l_i \leq D + l_s + s - n - 1)) \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \Rightarrow$$

$$fz_{j_s, j_{ik}, j^{sa}, j_i}^{DSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()} \sum_{(l_{ik}+j_{sa}-k-j_{sa}^{ik}+1)} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)} \sum_{(j_i=j^{sa}+s-1)} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{ik}-k_1}^{(n_{is}+j_{ik}-k_1)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{(n_{sa}+j^{sa}-j_i-1)}^{()} \frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - k_1 - k_2 + j_{sa}^s)!}{(n_i - n - k_1 - k_2 - 1)! \cdot (n_{is} + j_{sa}^{ik} - j_{sa}^s)! \cdot (n_{ik} - j_{sa}^{ik} - 1)! \cdot (n_{sa} - j_s - 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\begin{aligned} & ((D \geq n < n \wedge l_s > D - n + 1 \wedge \\ & 2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee \\ & (D \geq n < n \wedge l_s > D - n + 1 \wedge \\ & 2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee \\ & ((D \geq n < n \wedge l_s > D - n + 1 \wedge \\ & 2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee \end{aligned}$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$(D + s - n < l_i \leq D + l_s + s - n - 1)) \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{j_s=1}^{D+l_s+s-n-l_i} \sum_{j_{ik}=j_s^a+j_s^{sa}}^{(l_s+j_{sa}-k)} \sum_{j_{sa}=n+j_{sa}-D}^{(n+j_{sa}-D)} \sum_{j_i=s-j_{sa}}^{(n)} \sum_{n_i=n+\mathbb{k}}^n \sum_{n_{is}=n_{is}+j_s+1}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(n_i-j_s+1)} \sum_{n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}^{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}^{(n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3)} \frac{(n_i-j_s+j_{sa}^{ik}-j_{ik}-s-\mathbb{k}_1-\mathbb{k}_2-\mathbb{k}_3-j_{sa}^s)!}{(n_i-n-\mathbb{k}_1-\mathbb{k}_2-\mathbb{k}_3)! \cdot (n+j_s+j_{sa}^{ik}-j_{ik}-s-j_{sa}^s)!} \cdot \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!}$$

$$((D \geq n < n \wedge l_s = D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1)) \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=0}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}+j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D}^{l_{sa}+j_{sa}^{ik}-k-j_{sa}+1} \sum_{j_{sa}-j_{sa}^{ik}=j_{sa}+s-j_{sa}} \sum_{(n_i=n+\mathbb{k})}^{(n_i+1)}$$

$$\sum_{(n_s=n_{sa}+j_{sa}^{ik}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j_{sa}^{ik}-j_i-\mathbb{k}_3} \frac{(n_i+j_s+j_{sa}^{ik}-j_{ik}-s-\mathbb{k}_1-\mathbb{k}_2-\mathbb{k}_3-j_{sa}^s)!}{(n_i-\mathbb{k}_1-\mathbb{k}_2-\mathbb{k}_3)! \cdot (n+j_s+j_{sa}^{ik}-j_{ik}-s-j_{sa}^s)!}$$

$$\frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!}$$

$$\frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$j_{sa}^{ik} - 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$((D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \leq s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_1, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_{ik}-k+1} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{i_s}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{i_s}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{(\)} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_2}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - k_1 - k_2 - k_3 - j_{sa}^s)!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k - 1)! \cdot (l_i - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - l_i - l_i)! \cdot (n - j_i)!}$$

$((D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$

$(D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$

$(D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$

$(D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

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$(D \geq n < n \wedge l_s > D - n + 1 \wedge$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D > n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i}^{DSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()} \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-k} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j^{sa}+s-j_{sa}}^{()} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_i+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_i-j_i+\mathbb{k}_1}^{(n_{is}-n_{ik}+\mathbb{k}_2-\mathbb{k}_3-j_{sa})}^{(n_{sa}=n_{ik}-j_{sa}+s-j_i-\mathbb{k}_3)} \frac{(n_i + j_{sa}^{ik} - j_{sa} - s - \mathbb{k}_1 + \mathbb{k}_2 - \mathbb{k}_3 - j_{sa})!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! (n_i + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$((D \geq n < n \wedge l_i > D - n + 1) \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_s + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$

$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$

$(D + s - n < l_i \leq D + l_s + s - n - 1)) \wedge$

$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \dots) \vee$$

$$(D \geq \dots < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq \dots = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \dots = \mathbb{k}_2) \vee$$

$$(D \geq \dots < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$f_z^{DSD} S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{sa}-k-j_{sa}+2)} \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+s-j_{sa}}^{(j_i=j^{sa}+s-j_{sa})} \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-l_{k1}}^{(n_{ik}=n_{is}-j_{ik}-l_{k1})} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k2})}^{(n_{sa}=n_{sa}+j^{sa}-j_i)} \frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - l_{k2} - l_{k1} - j_{sa}^s)!}{(n_i - n - l_{k1} - l_{k2} - l_{k3})! \cdot (n_i + j_s + j_{sa}^{ik} - j_{ik} - l_{k2} - l_{k1} - j_{sa}^s)!} \cdot \frac{(l_{k2} - l_{k1} - 1)!}{(j_s - l_{k1} + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\begin{aligned} & ((D \geq n < n \wedge l_s > D - n + 1 \wedge \\ & 2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee \\ & (D \geq n < n \wedge l_s > D - n + 1 \wedge \\ & 2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee \\ & (D \geq n < n \wedge l_s > D - n + 1 \wedge \\ & 2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee \\ & (D \geq n < n \wedge l_s \leq D - n + 1 \wedge \end{aligned}$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

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$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

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$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

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$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

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$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

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$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \dots) \Rightarrow$$

$$fz_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j_{sa}^s+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

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$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

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$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

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$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

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$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

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$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

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$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

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$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

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$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

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$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

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$$l_i - s + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0) \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$(\mathbb{k}_2 \leq s \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

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$s \geq 6 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 5 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\}$

$s \geq 5 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

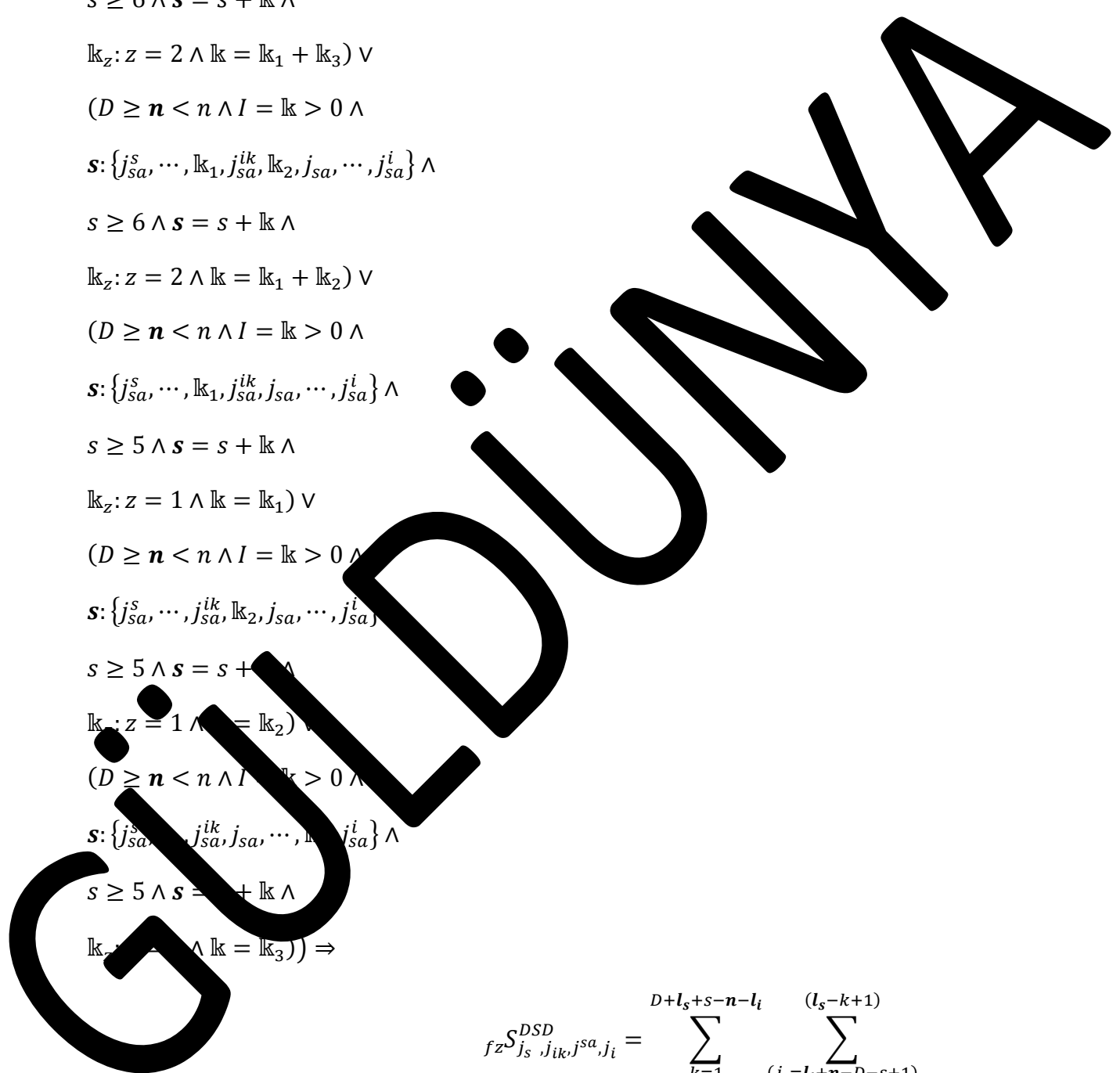
$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 5 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j_{sa}+s-j_{sa}}$$



$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{i_s}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{i_s}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_2}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (l_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - l_i - l_i)! \cdot (n - j_i)!}$$

$$\begin{aligned} & ((D \geq n < n \wedge l_s > D - n + 1 \wedge \\ & 2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \\ & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + j_{sa} - j_{sa} \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee \\ & (D \geq n < n \wedge l_s \leq D - n + 1 \wedge \\ & 1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + j_{sa} - j_{sa} \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge \\ & (D + j_{sa} - n < l_{sa} \wedge (D + l_s - n - 1)) \wedge \end{aligned}$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0) \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k \wedge$

$k_z: z = 2 \wedge k = k_1 + k_3) \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k \wedge$

$k_z: z = 2 \wedge k = k_1 + k_2) \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 5 \wedge s = s + k \wedge$

$k_z: z = 1 \wedge k = k_1) \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 5 \wedge s = s + k \wedge$

$k_z: z = 1 \wedge k = k_2) \vee$

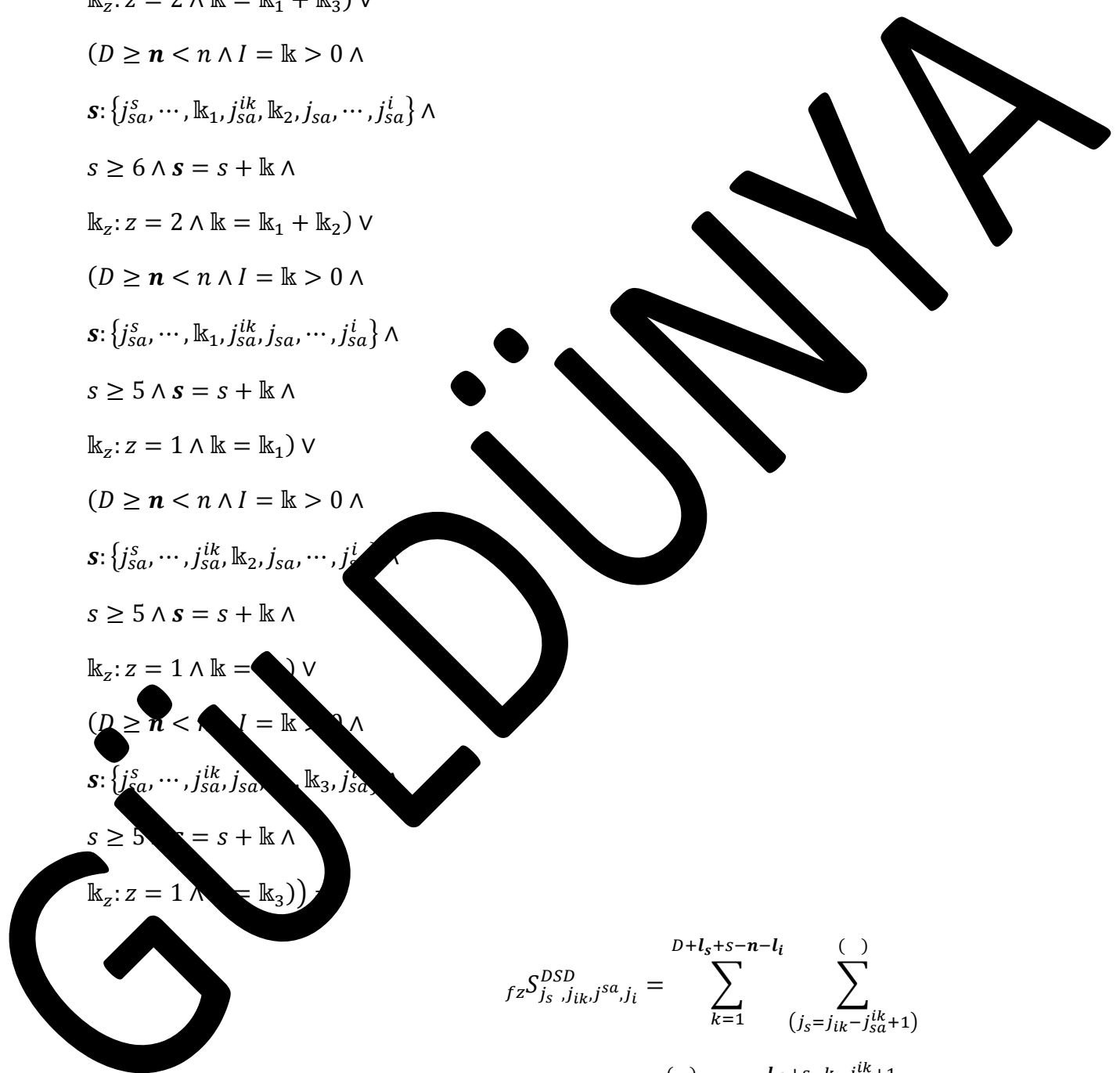
$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 5 \wedge s = s + k \wedge$

$k_z: z = 1 \wedge k = k_3) \vee$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i}^{DSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()} \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{()} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{ik}+s-k-j_{sa}^{ik}+1}$$



$$\sum_{n_i=n+k}^n \sum_{(n_{i_s}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{i_s}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{(\)} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_2}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - k_1 - k_2 - k_3 - j_{sa}^s)!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k - 1)! \cdot (l_i - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - l_i - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

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$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

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$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

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$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$S_{j_s, j_{sa}, j_i}^{D, s, j_{sa}, j_i} = \sum_{k=1}^{D-s+s-n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$= \sum_{(j_{sa}^{ik}-j_{sa})}^{() (j_{sa}^{sa}=j_i+j_{sa}-s)} \sum_{(j_i=l_{sa}+n+s-D-j_{sa})}^{l_s+s-k}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-\mathbb{k}_2)}^{() (n_s=n_{sa}+j_{sa}^{sa}-j_i-\mathbb{k}_3)}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

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$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

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$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

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$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

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$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$j_{sa}^{DSD} j_{ik} j_{sa} j_i = \sum_{k=1}^{D+l_s+s-j_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()} \\ j_{ik}=j_{sa}^{ik} j_{sa}^{ik}-j_{sa} \quad (j_{sa}^{sa}=l_{sa}+n-D) \quad j_i=j_{sa}^{sa}+s-j_{sa} \\ \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j_{sa}^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq \mathbf{n} < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

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$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

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$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_s \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$s \geq 5 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i}^{DSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(l_s+j_{sa}-k)} \sum_{(j^{sa}=l_{sa}+n-D)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s)}^{(n_i-j_s+1)} \sum_{(j_{ik}=n_{is}+j_s-j_{ik})}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n_i + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)!}{(j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$((D \geq n < n \wedge l_s > n - 1 \wedge$
 $2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$
 $j_{ik} + j_{sa}^{ik} - j_{sa} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$
 $l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$
 $(D > n < n \wedge l_s > n - 1 \wedge$
 $1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$
 $j_{ik} + j_{sa}^{ik} - j_{sa} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$
 $l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$
 $D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$
 $((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i}^{DSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa}}^{l_{ik}-k+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j^{sa}+s-j_{sa}}^{()}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=j_s-k-k_1}^{()}$$

$$\frac{\sum_{(n_{sa}=n_{ik}-j_{sa}^{ik}+j_{sa})}^{()} \sum_{n_s=j^{sa}+s-j_{sa}-k_3}^{()}}{(n_i + j_{sa}^{ik} - j_{sa} - s - k_1 - k_2 - k_3)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$((D \geq n < n \wedge l_s > D - n + 1) \wedge$
 $2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$
 $j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$
 $l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$
 $(D \geq n < n \wedge l_s > D - n + 1) \wedge$
 $2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$
 $j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$
 $l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$
 $(D \geq n < n \wedge l_s > D - n + 1) \wedge$
 $2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$
 $j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 7, \mathbb{k}_1 = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7, \mathbb{k}_2 = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

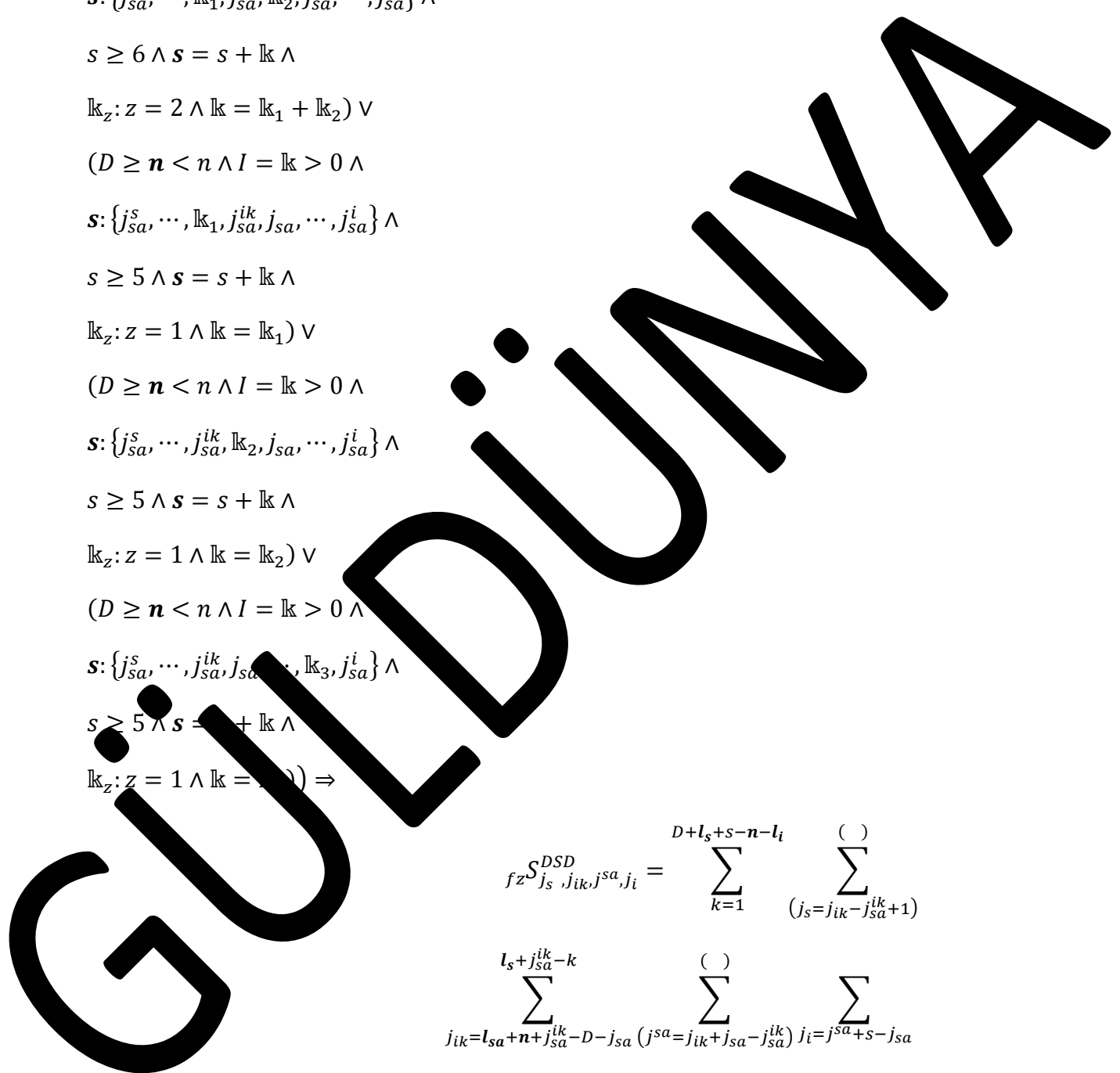
$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = \dots) \Rightarrow$$

$$fz S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa}}^{l_s+j_{sa}^{ik}-k} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}$$



$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - k_1 - k_2 - k_3 - j_{sa}^s)!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!}$$

$$\frac{(D - l_s)!}{(D + j_i - n - l_s)! \cdot (n - j_i)!}$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} - s - j_{sa} \leq j_{sa} < n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} - s - j_{sa} < n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - (k - 1) \wedge$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

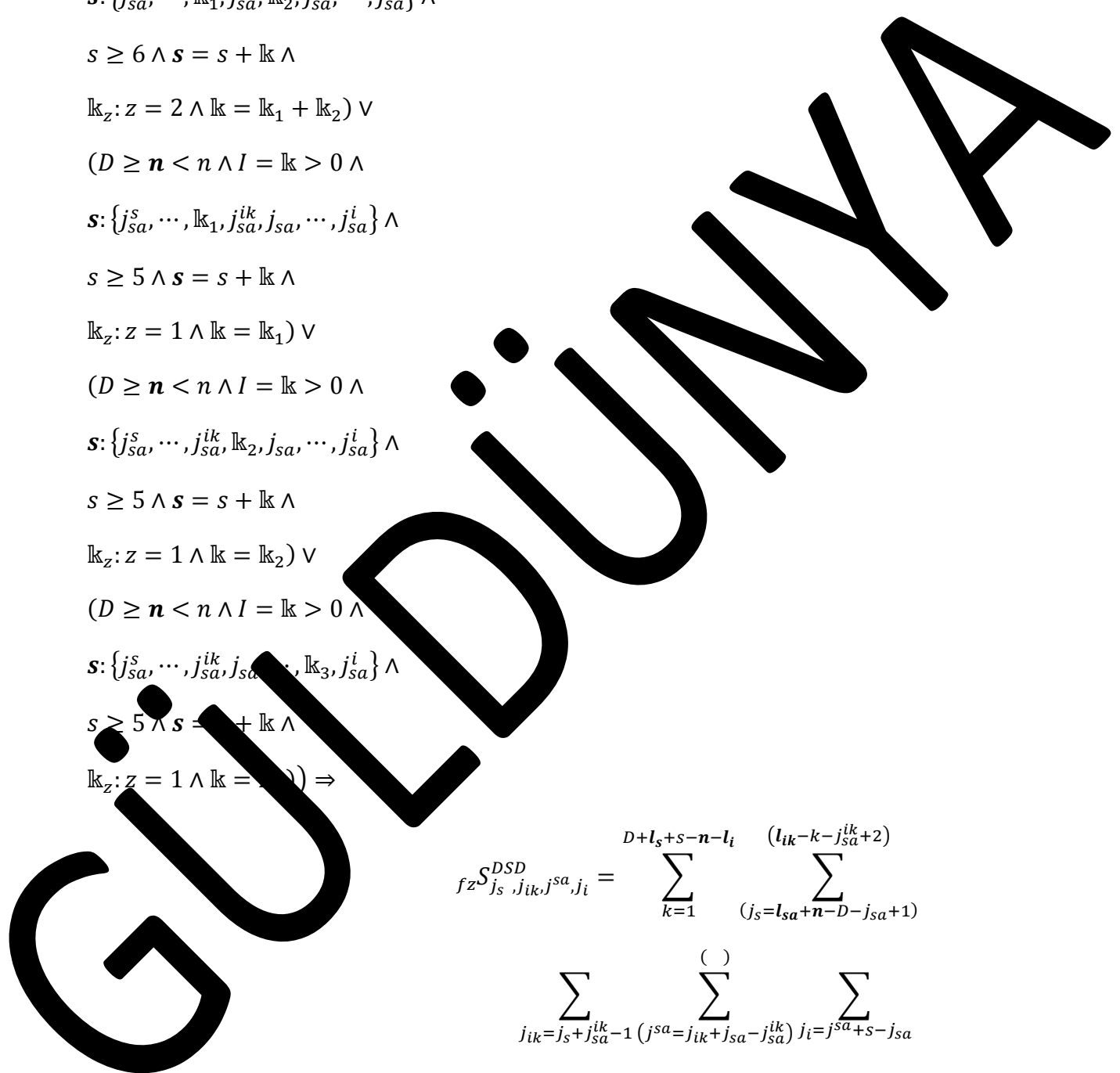
$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = \dots) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}$$



$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - k_1 - k_2 - k_3 - j_{sa}^s)!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!}$$

$$\frac{(D - l_s)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_{z_{s_{j_{ik} j_{sa}^i j_{sa}^s j_i}}^{DSD}} = \sum_{l_i=1}^{D+l_s+s-j_{ik}-j_{sa}-j_i} \sum_{(j_{sa}+n-D-j_{sa}+1)}^{(l_s-1)}$$

$$\sum_{j_s=j_s+j_{sa}^{lk_1}}^{(n)} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{lk_2})}^{(n)} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^{(n)} \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(n)} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1)) \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

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$$fz_{j_s, j_{sa}, j_i}^{SD} = \sum_{l_i=1}^{n-l_i} \binom{n-l_i}{j_s=j_{ik}-j_{sa}^{ik}+1} \sum_{j_{sa}=j_{sa}^{ik}-s}^{j_{sa}^{ik}} \sum_{j_i=l_{ik}+s+n-D-j_{sa}^{ik}}^{l_s+s-k} \sum_{n_{is}=n+k-j_s+1}^n \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-\mathbb{k}_2} \sum_{n_s=n_{sa}+j_{sa}^{ik}-j_i-\mathbb{k}_3} \frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^s)!}{n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1)) \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$\begin{aligned} & \sum_{j_{ik}=j_{sa}^s}^{D+l_s+s-1} \sum_{j_{ik}=j_{sa}^s}^{(l_s+j_{sa}^i)} \sum_{j_i=j_{sa}^s+j_{sa}-j_{ik}}^{(n_i-1)} \sum_{n_{ik}=n_{is}+j_{sa}-j_{ik}-\mathbb{k}_1}^{(n_{is}=n+\mathbb{k}-j_s+1)} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}^{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)} \\ & \frac{(n_i+j_{sa}+j_{sa}^{ik}-j_{ik}-s-\mathbb{k}_1-\mathbb{k}_2-\mathbb{k}_3-j_{sa})!}{(n_i-\mathbb{k}_1-\mathbb{k}_2-\mathbb{k}_3)! \cdot (n+j_s+j_{sa}^{ik}-j_{ik}-s-j_{sa})!} \cdot \\ & \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \\ & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} \end{aligned}$$

$$D > n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1)) \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z^{S^{DSD}}_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=1}^{D+j_s-n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)} \binom{l_s+j_{sa}^{ik}-k}{j_{ik}+n-j_{sa}^{ik}} \binom{n}{j_{sa}^{ik}} \binom{(n_i+1)}{n_i} \sum_{(n_{is}=n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-\mathbb{k}_2)} \sum_{n_s=n_{sa}+j_{sa}^{ik}-j_i-\mathbb{k}_3} \frac{(n_i+j_s-j_{sa}^{ik}-j_{ik}-s-\mathbb{k}_1-\mathbb{k}_2-\mathbb{k}_3-j_{sa}^s)!}{(n-n-\mathbb{k}_2-\mathbb{k}_3)! \cdot (n+j_s+j_{sa}^{ik}-j_{ik}-s-j_{sa}^s)!} \cdot \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1)) \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

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$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_{ik}+n-D+1)}^{(l_s-k)} \sum_{j_{ik}=j_{sa}^{ik}-1}^{(j_{sa}^{ik}-1)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}}^{(j_{sa}^{ik}-j_{ik}+j_{sa}-j_{sa})} \sum_{j_i=j_{sa}^i-1}^{(j_{sa}^i-1)} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n_{is}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(n_{is}-j_s+1)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}^{(n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3)} \frac{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s = n + 1 \wedge$$

$$2 \leq j_s \leq j_{sa}^{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa}^{ik} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{sa}^{ik} \leq j_{sa}^{ik} \leq j_i + j_{sa} - s \wedge j_{sa}^{ik} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\cdot)} \sum_{j_{ik}=j_{sa}+l_{ik}-l_{sa}}^{(\cdot)} \sum_{(j_{sa}=j_i+l_{sa}-l_i)}^{(\cdot)} \sum_{j_i=l_i+n-l}^{l_i-k+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-k_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa})}^{(\cdot)} \sum_{n_s=n_{sa}+j_{sa}-j_i}^{(\cdot)}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - k_2 - j_{sa}^s)!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (n_i + j_s + j_{sa}^{ik} - j_{ik} - k_2 - j_{sa}^s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n - 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa}^{ik} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa}^{ik} \leq j_{ik} < j_i + j_{sa} - s \wedge j_{sa}^{ik} + j_{sa}^{ik} - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 \leq l_{sa}^{ik} - j_{sa}^{ik} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D - n < n \wedge I = k > 0 \wedge$$

$$\{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}^i, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}^i, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_3, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \vee$$

$$fz_{j_s}^{DSD} j_{ik} j_{sa} j_i = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()}$$

$$\sum_{j_{ik}=j_{sa}+l_{ik}-l_{sa}} \sum_{(j_{sa}=j_i+l_{sa}-l_i)}^{()} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{sa}+s-k-j_{sa}+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - k_1 - k_2 - k_3 - j_{sa}^s)!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - l_i)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_{ik} < n$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - j_{ik} \wedge l_i + j_s - s = l_s \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3 \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3 \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z^{DSD} S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()}$$

$$\sum_{j_{ik}=j_{sa}+l_{ik}-l_{sa}}^{() \quad l_{ik}+s-k-j_{sa}^{ik}+1} \sum_{(j_{sa}=j_i+l_{sa}-l_i) \quad j_i=l_{ik}+n+s-D-j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j_{sa}^{ik}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s +$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=0}^{D-n+1} \sum_{(j_s = j_{ik} + l_s - l_{ik})}^{s-k} \sum_{(j_{ik} = j_{sa} + l_{ik})}^{(j_{sa} = j_i + l_i - l_i)} \sum_{(j_i = l_s + n + s - D - 1)}^{(n - j_i + 1)} \sum_{n_i = n - \mathbb{k}}^{n_i = n + j_s + 1} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2} \sum_{n_s = n_{sa} + j_{sa} - j_i - \mathbb{k}_3} \frac{(n_i + j_s - j_{ik} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$0 \leq j_s \leq l_s - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$

$$fz_{j_s, j_{ik}, j^{sa}, j_i}^{S_{DSD}} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()} \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa} \ (j^{sa}=j_i+l_{sa}-l_i)}^{()} \sum_{j_i=l_i+n-D}^{l_{sa}+s-k-j_{sa}+1} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{sa}=n_{is}-l_{sa}-k_2)}^{(n_{sa}=n_{is}-l_{sa}-k_2)} \sum_{(n_{sa}-j_s+l_{sa}-k_2)}^{(n_{sa}-j_s+l_{sa}-k_2)} \frac{(n_i + j_s + j_{sa}^{ik} - j_i - s - l_{sa} - k_2 - k_3)!}{(n_i - n - k_1 - k_2 - k_3)! (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!} \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_i \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} - j_{sa} \leq j_i \leq j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge j_{sa}^{ik} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$(D \geq n < n \wedge I = \mathbb{k} > 0) \wedge$

$s: \{j_s^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 7 \wedge s = s + \mathbb{k} \wedge$

$z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \vee$$

$$f_z^{S^{DSD}}_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{()} \sum_{j_i=l_i+n-D}^{l_{ik}+s-k-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{i_s}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{i_s}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - k_1 - k_2 - k_3 - j_{sa}^s)!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - l_i)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} - s - j_{sa} \leq j_s < n$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - j_{ik} \wedge l_i + j_s - s = l_s \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_s^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k$$

$$k_z: z = 2 \wedge k = k_2 + k_3 \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3 \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z^{DSD} S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()}$$

$$\sum_{j_{ik}=j_{sa}+l_{ik}-l_{sa}} \sum_{(j_{sa}=j_i+l_{sa}-l_i)}^{()} \sum_{j_i=l_i+n-D}^{l_s+s-k}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = \mathbf{s} + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = \mathbf{s} + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \binom{D-n+1}{j_s=j_{ik}+l_{ik}} \binom{l_{ik}}{l_{ik}} \sum_{j_{ik}=a+l_{ik}-l_{sa}}^{a+l_{ik}-l_{sa}} \binom{l_{sa}}{j_{sa}=l_{sa}-l_{ik}} \binom{l_{sa}-l_{ik}}{j_{sa}} \sum_{n_i=n+\mathbb{k}}^n \sum_{n_{is}=n_i-j_s+1}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \binom{n_{ik}}{n_{ik}} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3} \binom{n_s}{n_s} \frac{(n_i+j_s+j_{sa}^{ik}-j_{ik}-s-\mathbb{k}_1-\mathbb{k}_2-\mathbb{k}_3-j_{sa}^s)!}{(n_i-n-\mathbb{k}_1-\mathbb{k}_2-\mathbb{k}_3)! \cdot (n+j_s+j_{sa}^{ik}-j_{ik}-s-j_{sa}^s)!} \cdot \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!}$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$2 \leq j_s \leq j_{sa} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{sa} + j_{sa}^{ik} \leq j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - s \wedge j_{sa}^{ik} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge \mathbf{s} = \mathbf{s} + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\}$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\cdot)}$$

$$\sum_{j_{ik}=j_{sa}+l_{ik}-l_{sa}}^{(\cdot)} \sum_{(j_{sa}=j_i+l_{sa}-l_i)}^{(\cdot)} \sum_{j_i=l_{sa}+n+s-D-j_{ik}}^{l_{ik}+s-k-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-k_1}^{(\cdot)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-k_2)}^{(\cdot)} \sum_{(n_s=n_{sa}+j_{sa}-j_i)}^{(\cdot)}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - k_2 - k_3 - j_{sa}^s)!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (n_i + j_s + j_{sa}^{ik} - j_{ik} - k_2 - k_3 - j_{sa}^s)!}$$

$$\frac{(l_{ik} - k - 1)!}{(l_{ik} - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n - 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq n - j_{sa}^{ik} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa}^{ik} \leq j_{ik} < j_i + j_{sa} - s \wedge j_{sa}^{ik} - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_{sa} + j_{sa}^{ik} - j_{sa} - l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D - n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_3, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \vee$$

$$fz_{j_s}^{DSD} j_{ik} j_{sa} j_i = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()}$$

$$\sum_{j_{ik}=j_{sa}+l_{ik}-l_{sa}} \sum_{(j_{sa}=j_i+l_{sa}-l_i)}^{()} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_s+s-k}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - k_1 - k_2 - k_3 - j_{sa}^s)!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_{ik} < n$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - j_{ik} \wedge l_i + j_s - s = l_s \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3 \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3 \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()}$$

$$\sum_{j_{ik}=j_{sa}+l_{ik}-l_{sa}}^{() \quad l_i-k+1} \sum_{(j_{sa}=j_i+l_{sa}-l_i)}^{() \quad l_i-k+1} \sum_{j_i=l_{ik}+n+s-D-j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{() \quad l_i-k+1} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}+l_{ik})} \sum_{(j_{sa}+l_{sa}-j_{sa}+1)} \sum_{(j_{sa}+l_{sa}-j_{sa}-l_{sa})} \sum_{(j_{sa}+l_{sa}-j_{sa}-l_{sa})} \sum_{(n_i=n+\mathbb{k})} \sum_{(n_{is}=n_{is}-j_s+1)} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)} \sum_{(n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3)} \frac{(n_i+n_{is}+j_{sa}+j_{sa}+l_{sa}-j_{sa}-l_{sa}-\mathbb{k}_1-\mathbb{k}_2-\mathbb{k}_3-j_{sa}^s)!}{(n_i-n_{is}-\mathbb{k}_1-\mathbb{k}_2-\mathbb{k}_3)! \cdot (n+j_s+j_{sa}^{ik}-j_{ik}-s-j_{sa}^s)!} \cdot \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!}$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$2 \leq j_s \leq j_{sa} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_s + j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \dots) \vee$$

$$(D \geq \dots < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq \dots = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \dots = \mathbb{k}_2) \vee$$

$$(D \geq \dots < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()} \sum_{j_{ik}=j_{sa}+l_{ik}-l_{sa}}^{()} \sum_{(j_{sa}=j_i+l_{sa}-l_i)}^{()} \sum_{j_i=l_{ik}+n+s-D-j_{ik}}^{l_s+s-k} \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-l_{k1}}^{()} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-l_{k2})}^{()} \sum_{(n_s=n_{sa}+j_{sa}-j_i)}^{()} \frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - l_{k2} - l_{k3} - j_{sa}^s)!}{(n_i - n - l_{k1} - l_{k2} - l_{k3})! \cdot (n_i + j_s + j_{sa}^{ik} - j_{ik} - l_{k2} - l_{k3} - j_{sa}^s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - l_{k1} + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > D - n - 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa}^{ik} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa}^{ik} - j_{sa}^{ik} \leq j_{sa}^{ik} < j_i + j_{sa} - s \wedge j_{sa}^{ik} - j_{sa} \leq j_i \leq n \wedge$

$l_{k1} - j_{sa}^{ik} + 1 = l_{k2} \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$((D - n < n \wedge I = l_k > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, l_{k2}, j_{sa}, \dots, l_{k3}, j_{sa}^i\} \wedge$

$s \geq 7 \wedge s = s + l_k \wedge$

$l_{kz}: z = 3 \wedge l_k = l_{k1} + l_{k2} + l_{k3}) \vee$

$(D \geq n < n \wedge I = l_k > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, l_{k2}, j_{sa}, \dots, l_{k3}, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + l_k \wedge$

$l_{kz}: z = 2 \wedge l_k = l_{k2} + l_{k3}) \vee$

$(D \geq n < n \wedge I = l_k > 0 \wedge$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \vee$$

$$fz_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()} \sum_{j_{ik}=j_{sa}+l_{ik}-l_{sa}}^{()} \sum_{(j_{sa}=j_i+l_{sa}-l_i)}^{()} \sum_{j_i=l_s+n+s-D-1}^{l_i-k+1} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - k_1 - k_2 - k_3 - j_{sa}^s)!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - l_i)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_{ik} < n$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - j_{ik} \wedge l_i + j_{sa} - s = l_s \wedge$

$((D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j^i\} \wedge$

$s \geq 7 \wedge s = s + k \wedge$

$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k$

$k_z: z = 2 \wedge k = k_2 + k_3 \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k \wedge$

$k_z: z = 2 \wedge k = k_1 + k_3 \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k \wedge$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z^{DSD} S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()}$$

$$\sum_{j_{ik}=j_{sa}+l_{ik}-l_{sa}}^{()} \sum_{(j_{sa}=j_i+l_{sa}-l_i)}^{()} \sum_{j_i=l_s+n+s-D-1}^{l_{sa}+s-k-j_{sa}+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = \mathbf{s} + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = \mathbf{s} + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \binom{D-n+1}{j_s=j_{ik}+k} \binom{D-n+1}{l_{ik}} \sum_{j_{ik}=j_{sa}+k}^{n} \binom{D-n+1}{l_{ik}+s-k-j_{sa}^{ik}+1} \sum_{j_{sa}=j_{ik}-l_{sa}}^{n} \binom{D-n+1}{j_i+l_{sa}-l_{ik}} \sum_{j_i=n+1}^{n} \binom{D-n+1}{j_i+l_{sa}-l_{ik}} \sum_{n_i=n+k}^{n} \binom{D-n+1}{n_i=n_{is}+j_s+1} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{n} \binom{D-n+1}{n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}^{n} \binom{D-n+1}{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3} \frac{(n_{ik}+j_s+j_{sa}^{ik}-j_{ik}-s-\mathbb{k}_1-\mathbb{k}_2-\mathbb{k}_3-j_{sa}^s)!}{(n_i-n-\mathbb{k}_1-\mathbb{k}_2-\mathbb{k}_3)! \cdot (n+j_s+j_{sa}^{ik}-j_{ik}-s-j_{sa}^s)!} \cdot \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!}$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$2 \leq j_s \leq j_{sa} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_s + j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \Rightarrow$$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{(l_i+j_{sa}-k-s+1)} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - k_2 - j_{sa}^s)!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (n_i + j_s + j_{sa}^{ik} - j_{ik} - k_2 - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n - 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa}^{ik} \leq j_{ik} \leq j_i + j_{sa} - s \wedge j_{sa}^{ik} + j_{sa}^{ik} - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_{sa}^{ik} - j_{sa}^{ik} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D - n < n \wedge I = k > 0 \wedge$$

$$\{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}^i, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}^i, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_3, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \vee$$

$$fz_{j_s}^{DSD} j_{ik} j_{sa} j_i = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()}$$

$$\sum_{j_{ik}=j_{sa}+l_{ik}-l_{sa}} \sum_{(j_{sa}=l_{sa}+n-D)}^{(l_{sa}-k+1)} \sum_{j_i=j_{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - k_1 - k_2 - k_3 - j_{sa}^s)!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - l_i)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_{ik} < n$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - j_{ik} \wedge l_i + j_s - s = l_s \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_s^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3 \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3 \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z^{DSD} S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()}$$

$$\sum_{j_i=j_{sa}+l_{ik}-l_{sa}}^{(l_{ik}+j_{sa}-k-j_{sa}^{ik}+1)} \sum_{(j_{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik})} \sum_{j_i=j_{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=0}^{D-n+1} \sum_{(j_s = j_{ik} + l_s - l_{ik})} \sum_{(j_{ik} = j_{sa} + l_{ik} - l_{sa})} \sum_{(j_i = j_{sa} + l_i - l_{sa})} \sum_{(n_{is} = n_{is} + j_s + 1)} \sum_{(n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1)} \sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)} \sum_{(n_s = n_{sa} + j_{sa} - j_i - \mathbb{k}_3)} \frac{(n_i + j_s - j_{ik} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$s \geq j_s \leq j_{sa} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$

$$fz_{j_s, j_{ik}, j^{sa}, j_i}^{SDSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)}^{(l_{sa}-k+1)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{(n_{sa}=n+k-j_s+1)}^{()} \sum_{(n_{sa}=n+k-j_s+1)}^{()} \sum_{(n_{sa}=n+k-j_s+1)}^{()} \sum_{(n_{sa}=n+k-j_s+1)}^{()}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_i - s - l_{sa} - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_i \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} + j_{sa} \leq j_i \leq j_{sa} - s + j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge j_{sa}^{ik} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$(D \geq n < n \wedge I = \mathbb{k} > 0) \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 7 \wedge s = s + \mathbb{k} \wedge$

$z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \vee$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()}$$

$$\sum_{j_{ik}=j_{sa}^{sa}+l_{ik}-l_{sa}}^{(l_{ik}+j_{sa}-k-j_{sa}^{ik}+1)} \sum_{(j_{sa}=l_i+n+j_{sa}-D-s)} \sum_{j_i=j_{sa}^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - k_1 - k_2 - k_3 - j_{sa}^s)!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - l_i)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_{ik} < n$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - j_{ik} \wedge l_i + j_{sa} - s = l_s \wedge$

$((D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j^i\} \wedge$

$s \geq 7 \wedge s = s + k \wedge$

$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k$

$k_z: z = 2 \wedge k = k_2 + k_3 \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k \wedge$

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$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k \wedge$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

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$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z^{DSD} S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()}$$

$$\sum_{j_{ik}=j_{sa}+l_{ik}-l_{sa}}^{(l_s+j_{sa}-k)} \sum_{(j_{sa}=l_i+n+j_{sa}-D-s)} \sum_{j_i=j_{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \binom{D-n+1}{j_s=j_{ik}+l_{ik}} \binom{l_i+j_{sa}-k-1}{j_{sa}=l_{sa}+n_{sa}+j_{sa}-j_{ik}-l_{sa}} \binom{n_i-j_s+1}{n_i=n+k} \binom{n_{is}=n_{is}-j_s+1}{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \binom{n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3} \frac{(n_i+j_s+j_{sa}^{ik}-j_{ik}-s-\mathbb{k}_1-\mathbb{k}_2-\mathbb{k}_3-j_{sa}^s)!}{(n_i-n_{is}-j_s-\mathbb{k}_3)! \cdot (n+j_s+j_{sa}^{ik}-j_{ik}-s-j_{sa}^s)!} \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!}$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$2 \leq j_s \leq j_{sa} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{sa} + j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - s \wedge j_{sa}^{ik} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

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$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

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$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()} \sum_{j_{ik}=j_{sa}+l_{ik}-l_{sa}}^{(l_{ik}+j_{sa}-k-j_{sa}^{ik}+1)} \sum_{(j_{sa}=l_{sa}+n-D)} \sum_{j_i=j_{sa}+l_i-l_{sa}} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-k_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j_{sa}-j_i} \frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - k_2 - k_3 - j_{sa}^s)!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (n_i + j_s + j_{sa}^{ik} - j_{ik} - k_2 - k_3 - j_{sa}^s)!} \cdot \frac{(l_{ik} - k - 1)!}{(l_{ik} - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n - 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa}^{ik} \leq j_{sa}^{ik} \leq j_i + j_{sa} - s \wedge j_{sa}^{ik} - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 \leq l_{sa} + j_{sa}^{ik} - j_{sa} \wedge l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D - n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

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$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

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$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_3, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \vee$$

$$fz S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()}$$

$$\sum_{j_{ik}=j_{sa}+l_{ik}-l_{sa}} \sum_{(j_{sa}=l_{sa}+n-D)}^{(l_s+j_{sa}-k)} \sum_{j_i=j_{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - k_1 - k_2 - k_3 - j_{sa}^s)!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

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$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_{ik} < n$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - j_{ik} \wedge l_i + j_s - s = l_s \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

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$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \vee$$

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$$s \geq 6 \wedge s = s + k \wedge$$

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$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_s^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

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$$(D \geq n < n \wedge I = k > 0 \wedge$$

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$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

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$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

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$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z^{DSD} S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()}$$

$$\sum_{j_s=j_{sa}+l_{ik}-l_{sa}}^{(l_i+j_{sa}-k-s+1)} \sum_{(j_{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik})} \sum_{j_i=j_{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik})}^{(l_{ik})} \sum_{(l_{sa}-k+1)} \sum_{(j_{sa}=l_{ik}+j_{sa}-D-j_s)} \sum_{(l_i-l_{sa})} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3} \frac{(n_{ik}+j_s+j_{sa}^{ik}-j_{ik}-s-\mathbb{k}_1-\mathbb{k}_2-\mathbb{k}_3-j_{sa}^s)!}{(n_i-n-\mathbb{k}_1-\mathbb{k}_2-\mathbb{k}_3)! \cdot (n+j_s+j_{sa}^{ik}-j_{ik}-s-j_{sa}^s)!} \cdot \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!}$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$2 \leq j_s \leq j_{sa}^{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{sa}^{ik} + j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \dots) \vee$$

$$(D \geq \dots < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq \dots = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \dots = \mathbb{k}_2) \vee$$

$$(D \geq \dots < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(l_s+j_{sa}-k)} \sum_{j_{ik}=j_{sa}+l_{ik}-l_{sa}}^{(j_{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik})} \sum_{j_i=j_{sa}+l_i-l_{sa}}^{(n_i-j_s+1)} \sum_{n_i=n+l_k}^{(n_{is}=n+l_k-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-l_{k_1}}^{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-l_{k_2})} \sum_{n_s=n_{sa}+j_{sa}-j_i}^{(n_s=n_{sa}+j_{sa}-j_i)} \frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - l_{k_2} - l_{k_3} - j_{sa}^s)!}{(n_i - n - l_{k_1} - l_{k_2} - l_{k_3})! \cdot (n_i + j_s + j_{sa}^{ik} - j_{ik} - l_{k_2} - l_{k_3} - j_{sa}^s)!} \cdot \frac{(n_i - j_s - l_{k_1} - l_{k_2} - l_{k_3} - k - 1)!}{(n_i - j_s - l_{k_1} - l_{k_2} - l_{k_3} + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

- $D \geq n < n \wedge l_s > D - n - 1 \wedge$
- $2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa}^{ik} + j_{sa}^{ik} - j_{sa} \wedge$
- $j_{ik} + j_{sa}^{ik} - j_{sa}^{ik} \leq j_i \leq j_i + j_{sa} - s \wedge j_{sa}^{ik} - j_{sa} \leq j_i \leq n \wedge$
- $l_{ik} - j_{sa}^{ik} + 1 = l_{sa} + j_{sa}^{ik} - j_{sa} - l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$
- $((D - n < n \wedge I = \mathbb{k} > 0 \wedge$
- $s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$
- $s \geq 7 \wedge s = s + \mathbb{k} \wedge$
- $\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$
- $(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$
- $s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$
- $s \geq 6 \wedge s = s + \mathbb{k} \wedge$
- $\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$
- $(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_3, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \vee$$

$$fz S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()}$$

$$\sum_{j_{ik}=j_{sa}+l_{ik}-l_{sa}} \sum_{(l_i+j_{sa}-k-s+1)}^{(l_i+j_{sa}-k-s+1)} \sum_{j_i=j_{sa}+l_i-l_{sa}}^{(l_i+j_{sa}-k-s+1)}$$

$$\sum_{n_i=n+k}^n \sum_{(n_i=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - k_1 - k_2 - k_3 - j_{sa}^s)!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - l_i)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_{ik} < n$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - j_{ik} \wedge l_i + j_{sa} - s = l_s \wedge$

$((D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j^i\} \wedge$

$s \geq 7 \wedge s = s + k \wedge$

$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k$

$k_z: z = 2 \wedge k = k_2 + k_3 \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k \wedge$

$k_z: z = 2 \wedge k = k_1 + k_3 \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k \wedge$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z^{DSD} S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+l_{ik}-l_{sa}}^{(l_{sa}-k+1)} \sum_{(j_{sa}=l_s+n+j_{sa}-D-1)}^{()} \sum_{j_i=j_{sa}^{ik}+l_i-l_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j_{sa}^{ik}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = \mathbf{s} + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = \mathbf{s} + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}+l_{ik})} \sum_{(l_s+j_{sa}-k-j_{sa}^{ik})} \sum_{(j_{sa}=j_{sa}^{ik}+j_{sa}-D)} \sum_{(l_i-l_{sa})} \sum_{(n_i=n+\mathbb{k} \wedge (n_{is}=n_{is}+j_s+1) \wedge n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-\mathbb{k}_2)} \sum_{(n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3)} \frac{(n_{is}+j_s+j_{sa}^{ik}-j_{ik}-s-\mathbb{k}_1-\mathbb{k}_2-\mathbb{k}_3-j_{sa}^s)!}{(n_i-n-\mathbb{k}_1-\mathbb{k}_2-\mathbb{k}_3)! \cdot (n+j_s+j_{sa}^{ik}-j_{ik}-s-j_{sa}^s)!} \cdot \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!}$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$2 \leq j_s \leq j_{sa}^{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$+ j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_i+j_{sa}^{ik}-k-s+1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{()} \sum_{j_i=j^{sa}+l_i-l_{ik}}^{()}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-k_1}^{()}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{(n_{is}=n_{sa}+j^{sa}-j_i)}^{()}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - k_2 - k_3 - j_{sa}^s)!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (n_i + j_{sa}^{ik} - j_{ik} - k_2 - k_3 - j_{sa}^s)!} \cdot \frac{(l_i - k - 1)!}{(l_i - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n \wedge I = k > 0 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq l_i + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa} \leq j_i + j_{sa} - s \wedge j_{sa}^{ik} - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 \leq l_{sa} + j_{ik} - j_{sa} \wedge l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D - n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k \wedge$

$k_z: z = 2 \wedge k = k_1 + k_3) \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k \wedge$

$k_z: z = 2 \wedge k = k_1 + k_2) \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 5 \wedge s = s + k \wedge$

$k_z: z = 1 \wedge k = k_1) \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 5 \wedge s = s + k \wedge$

$k_z: z = 1 \wedge k = k_2) \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

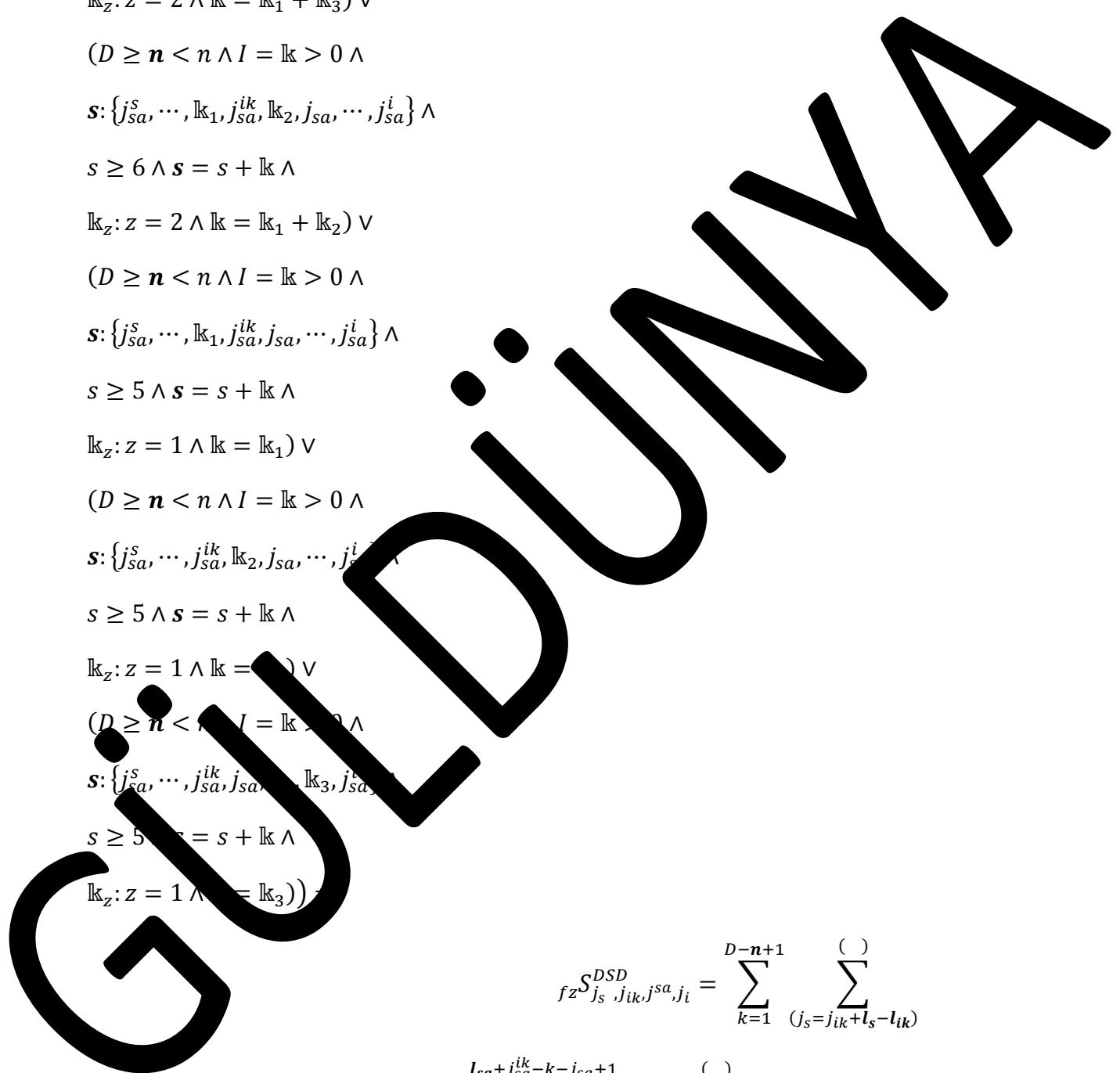
$s \geq 5 \wedge s = s + k \wedge$

$k_z: z = 1 \wedge k = k_3) \vee$

$$f_z^{S^{DSD}}_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()}$$

$$\sum_{j_{ik}=l_{sa}+n+j_{sa}^{lk}-D-j_{sa}}^{l_{sa}+j_{sa}^{lk}-k-j_{sa}+1} \sum_{(j_{sa}=j_{ik}+l_{sa}-l_{ik})}^{()} \sum_{j_i=j_{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}$$



$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - k_1 - k_2 - k_3 - j_{sa}^s)!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - l_i)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_{ik} < n$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - j_{ik} \wedge l_i + j_s - s = l_s \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3 \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3 \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z^{DSD} S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{k-k+1} \sum_{(j_{sa}=j_{ik}+l_{sa}-l_{ik})}^{()} \sum_{j_i=j_{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$s \geq 5 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 5 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$

$$fz_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik})} \sum_{(l_{ik})} \sum_{j_{ik}=l_s+n}^{l_s+j_{sa}^{ik}-k} \sum_{(j_{ik}+l_{sa})} \sum_{(l_i-l_{sa})} \sum_{n_i=n+k}^n \sum_{(n_{is}=n_{is}+j_s+1)} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)} \sum_{(n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3)} \frac{(n_{ik}+j_s+j_{sa}^{ik}-j_{ik}-s-\mathbb{k}_1-\mathbb{k}_2-\mathbb{k}_3-j_{sa}^s)!}{(n_i-n-\mathbb{k}_1-\mathbb{k}_2-\mathbb{k}_3)! \cdot (n+j_s+j_{sa}^{ik}-j_{ik}-s-j_{sa}^s)!} \cdot \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!}$$

$D \geq n < n \wedge l_s = n + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \Rightarrow$$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_{sa}+j_{sa}^{ik}-k-j_{sa}+1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{()} \sum_{j_i=j^{sa}+l_i-l_{ik}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{n_{is}=n_{sa}+j_{sa}-j_i}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - k_2 - k_3 - j_{sa}^s)!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (n_{is} + j_{sa}^{ik} - j_{sa} - j_{sa}^s)!} \cdot \frac{(l_{sa} - k - 1)!}{(j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n \wedge I = k > 0 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq l_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa} \leq j_i + j_{sa} - s \wedge j_{sa}^{ik} - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 \leq l_{sa} + j_{sa}^{ik} - j_{sa} \wedge l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D - n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \vee$$

$$f_z^{S^{DSD}}_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=1}^{D-n+1} \sum_{\binom{()}{j_s=j_{ik}+l_s-l_{ik}}}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_{ik}-k+1} \sum_{\binom{()}{j_{sa}=j_{ik}+l_{sa}-l_{ik}}} \sum_{j_i=j_{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{\binom{(n_i-j_s+1)}{n_{is}=n+\mathbb{k}-j_s+1}} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - k_1 - k_2 - k_3 - j_{sa}^s)!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - l_i)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} - s - j_{sa} \leq j_s < n$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - j_{ik} \wedge l_i + j_s - s = l_s \wedge$

$((D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_s^i\} \wedge$

$s \geq 7 \wedge s = s + k \wedge$

$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k$

$k_z: z = 2 \wedge k = k_2 + k_3 \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

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$s \geq 6 \wedge s = s + k \wedge$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z^{DSD} S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s-k} \sum_{(j_{sa}=j_{ik}+l_{sa}-l_{ik})}^{()} \sum_{j_i=j_{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

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$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

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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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$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s +$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

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$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

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$$\sum_{l_i=0}^{k-k-s+1} \sum_{(j_{sa}=j_{ik}-l_{ik})} \sum_{(j_i=j_{sa}+l_i-l_{sa})}$$

$$\sum_{n_i=0}^n \sum_{(n_{is}=n_i+j_s+1)} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)} \sum_{(n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3)}$$

$$\frac{(n_i + j_s + j_{sa} - j_{ik} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^s)!}{(n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

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$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

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$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

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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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$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

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$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

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$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

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$$k_z: z = 1 \wedge k = k_1) \vee$$

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$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

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$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz_{j_s, j_{ik}, j^{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()} \sum_{j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa}}^{l_{ik}-k+1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{()} \sum_{j_i=j^{sa}+l_i-l_{i_3}}^{(n_i-j_s+1)} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{i_s}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{i_2}=n+\mathbb{k}-\mathbb{k}_1}^{(n_i-j_s+1)} \sum_{(n_{sa}=n+\mathbb{k}-\mathbb{k}_2)}^{(n_i-j_s+1)} \sum_{n_s=n+\mathbb{k}-j_s+l_{i_3}}^{(n_i-j_s+1)} \frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!} \cdot \frac{(l_s - k - 1)!}{(l_s + j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_i \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} - j_{sa} \leq j_i \leq j_{sa} - s + j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$(D \geq n < n \wedge l_s > D - n + 1) \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$(z = 1 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1) \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

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$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

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$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\}$

$s \geq 5 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

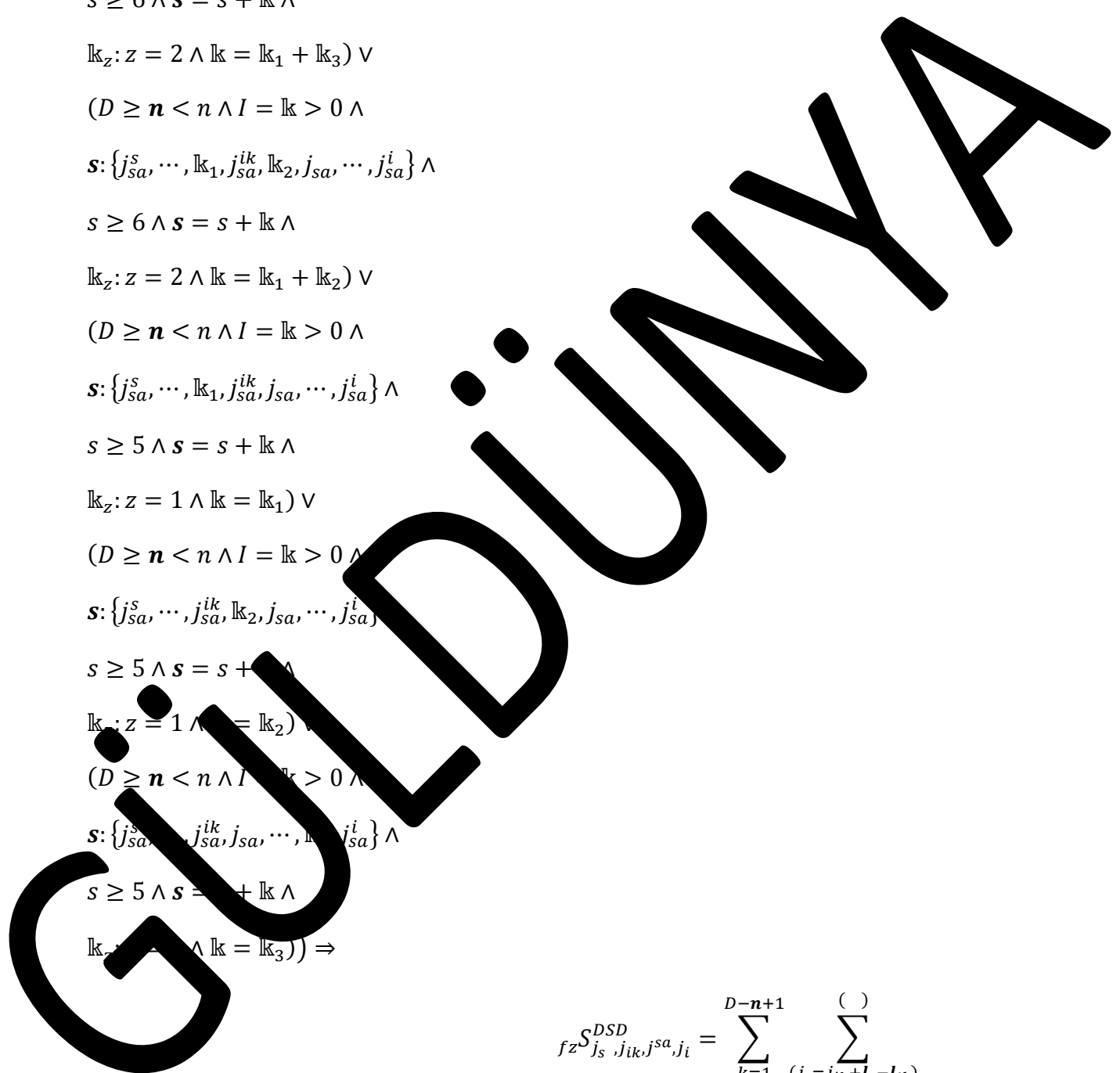
$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 5 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()}$$

$$\sum_{j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa}}^{l_s+j_{sa}^{ik}-k} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{()} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$



$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{(\)} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_2}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - k_1 - k_2 - k_3 - j_{sa}^s)!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k - 1)! \cdot (l_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - l_i - l_i)! \cdot (n - j_i)!}$$

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$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j_i + s - j_{sa} \leq j_i < n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_i = l_{ik} \wedge l_{sa} - j_{sa} - s = l_{ik} \wedge$$

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$$s \geq 5 \wedge s = s + k \wedge$$

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$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_i+j_{sa}^{ik}-k-s+1} \sum_{(j_{sa}=j_{ik}+l_{sa}-l_{ik})}^{()} \sum_{j_i=j_{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j_{sa}-j_i-k_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - k_1 - k_2 - k_3 - j_{sa}^s)!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

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$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

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$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

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$$s \geq 5 \wedge s = s + k \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$j_{ik}^{j_{sa}^{s+1}} = \sum_{k=1}^{j_{sa}^{s+1}} (j_s = j_{ik} + l_s - l_{ik})$$

$$\sum_{j_{ik}=l_{ik}^{s+1}-D}^{j_{sa}^{ik}-k-j_{sa}+1} (j_{sa}^{s+1}-k+l_{sa}-l_{ik}) \sum_{j_i=j_{sa}^{s+1}-l_{sa}} (j_s+1)$$

$$\sum_{n+l_{ik}}^n (n_{is}=n+l_{ik}-j_s+1) n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)} (n_s=n_{sa}+j_{sa}^{s+1}-j_i-\mathbb{k}_3)$$

$$(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^s)!$$

$$n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$s \geq 5 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_s+j_{sa}^{ik}-k} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{()} \sum_{j_i=l_{ik}+l_i-l_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$(n_{is}=n_{ik}+j_{ik}+j^{sa}-\mathbb{k}_2) n_s=n_{is}+j_s-j_{ik}-\mathbb{k}_3$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n_{is} + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > l_s + n + 1 \wedge$

$z = j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} - j_{sa} - j_{sa}^{ik} \leq j^{sa} + j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} = l_s \wedge l_{sa} - j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$((D > n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 7 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$

$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_1, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \Rightarrow$$

$$f_z^{S^{DSD}}_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()}$$

$$\sum_{j_{ik}=l_s+n+j_{sa}^{ik}-D-1}^{l_i+j_{sa}^{ik}-k-s+1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{()} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{i_s}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{i_s}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{(\)} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_2}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - k_1 - k_2 - k_3 - j_{sa}^s)!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k - 1)! \cdot (l_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - l_i - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} - j_{sa}^{ik} - j_{sa}$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j_i + s - j_{sa} \leq j_i - n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_i = l_{ik} \wedge l_{sa} - j_{sa} - s = l_i \wedge$

$((D \geq n < n \wedge l = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 7 \wedge s = s + k \wedge$

$k_2: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$

$(D \geq n < n \wedge l = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k \wedge$

$k_2: z = 2 \wedge k = k_2 + k_3) \vee$

$(D \geq n < n \wedge l = k > 0 \wedge$

$s: \{j_{sa}, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k \wedge$

$k_2: z = 2 \wedge k = k_1 + k_3) \vee$

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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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$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()}$$

$$\sum_{j_{ik}=l_s+n+j_{sa}^{ik}-D-1}^{l_{sa}+j_{sa}^{ik}-k-j_{sa}+1} \sum_{(j_{sa}=j_{ik}+l_{sa}-l_{ik})}^{()} \sum_{j_i=j_{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j_{sa}-j_i-k_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - k_1 - k_2 - k_3 - j_{sa}^s)!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

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$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$j_{ik}^{DSD} = \sum_{k=1}^{j_{ik}^{sa}+1} \binom{j_{ik}^{sa}+1}{j_s=j_{ik}+l_s-l_{ik}}$$

$$\sum_{l_{ik}=l_s+n_{ik}-D-1}^{l_{ik}-k+1} \binom{l_{ik}-k+1}{j_{sa}=l_{ik}+l_{sa}-l_{ik}} \sum_{j_i=j_{sa}+l_i-l_{sa}}$$

$$\sum_{n_{ik}=n+l_{ik}-j_s+1}^n \binom{j_s+1}{n+l_{ik}} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)} \binom{n_{sa}+j_{ik}-j_{sa}-\mathbb{k}_2}{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}$$

$$\binom{l_i + j_s + j_{sa}^{ik} - j_{ik} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^s}{n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3}!$$

$$\cdot \binom{n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s}{(n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)}!$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

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$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_i+n-D-s+1)}^{(l_i-k-s+2)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s}^{(j^{sa}=j_{ik}+l_{sa}-l_{ik})} \sum_{j_i=j_s+l_i-l_{sa}}^{(n_i-j_s+1)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s)}^{(n_{ik}=n_{is}+j_s-j_{ik})} \sum_{(n_{is}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(n_{is}-j_i-\mathbb{k}_3)}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - \mathbb{k}_1 - \mathbb{k}_3 - j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n_i + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n \wedge l_s > n + 1 \wedge$$

$$j_s \leq j_{ik} - \mathbb{k}_1 + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} - j_{sa} - j_{sa}^{ik} \leq j_s \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$j_{sa}^{ik} - j_{sa} - 1 = l_s \wedge l_{sa} \wedge j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n) \wedge \dots = 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\}$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

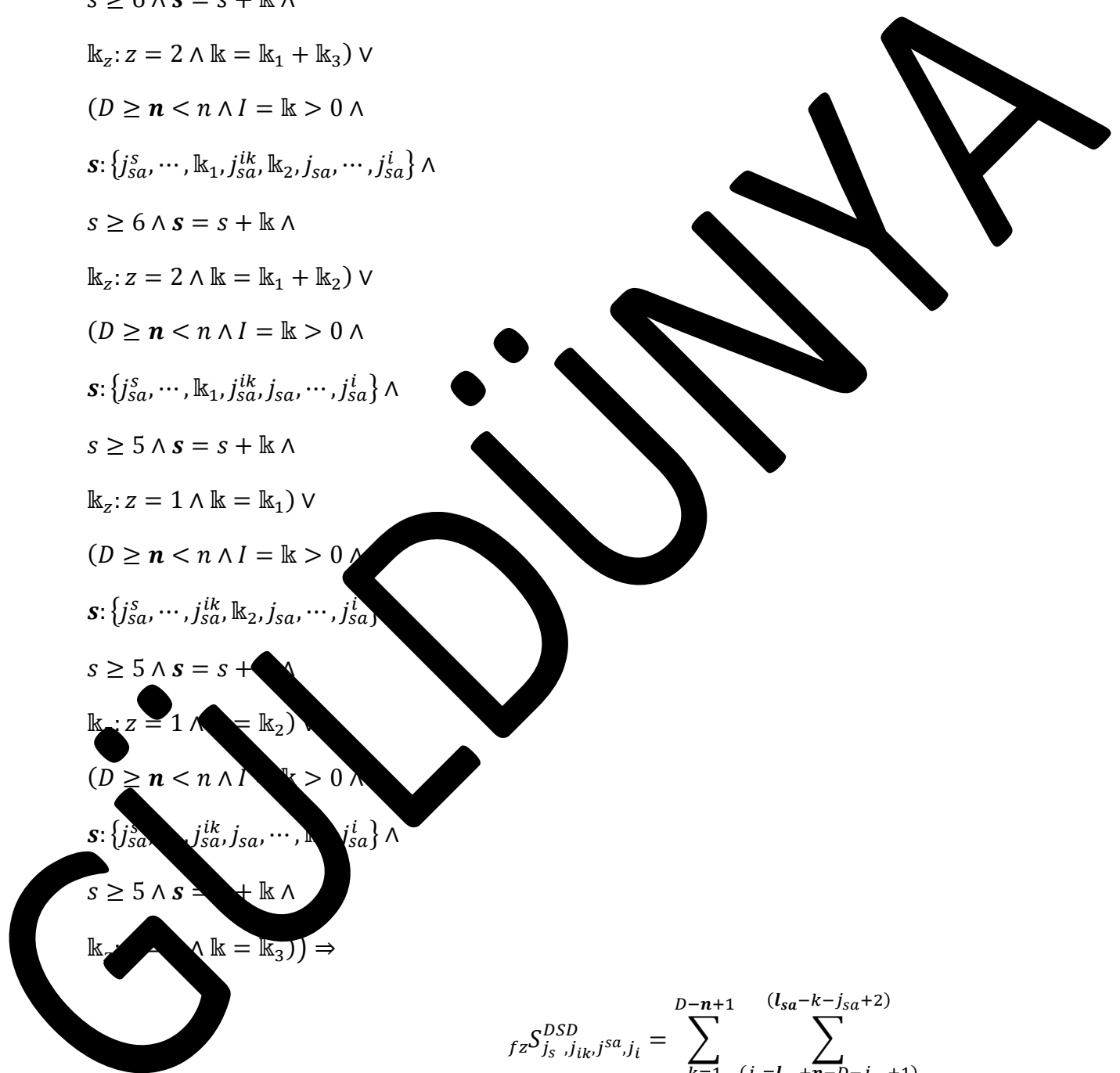
$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_{sa}-k-j_{sa}+2)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$



$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{(\quad)} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_2}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - k_1 - k_2 - k_3 - j_{sa}^s)!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k - 1)! \cdot (l_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - l_i - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} - j_{sa}^{ik} - j_{sa}$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j_i + s - j_{sa} \leq j_i < n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_i = l_{ik} \wedge l_{sa} - j_{sa} - s = l_{ik} \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_2: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_2: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_2: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$\sum_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s} \sum_{(j_{sa}=j_{ik}+l_{sa}-l_{ik})}^{()} \sum_{j_i=j_{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$\sum_{j_s, j_{ik}}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)}$$

$$\sum_{j_{ik}+l_{ik}-l_s}^{(j_{sa}^{sa-k+l_{sa}-l_{ik}})} \sum_{j_i=j_{sa}^{sa+l_i-l_{sa}}}$$

$$\sum_{n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k1}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-l_{k2})}^{(j_{sa}^{sa-k+l_{sa}-l_{ik}})} \sum_{n_s=n_{sa}+j_{sa}-j_i-l_{k3}}$$

$$\frac{(n+l_s+j_s+j_{sa}^{ik}-j_{ik}-s-l_{k1}-l_{k2}-l_{k3}-j_{sa}^s)!}{(n_i-n-l_{k1}-l_{k2}-l_{k3})! \cdot (n+l_s+j_{sa}^{ik}-j_{ik}-s-j_{sa}^s)!} \cdot \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$s \geq 5 \wedge s = s + k \wedge$

$k_z: z = 1 \wedge k = k_3) \Rightarrow$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{sa}-k-j_{sa}+2)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s}^{(j^{sa}=j_{ik}+l_{sa}-l_{ik})} \sum_{j_i=j_s+l_i-l_{sa}}^{(n)}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}+1}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_{i3}=n_{is}+j_s-j_{i3}}^{(j_i-k_3)}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - k_1 - k_2 - k_3 - j_{sa}^s)!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (n_{is} + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n \wedge l_s > n + 1 \wedge$

$j_s \leq j_{ik} - k + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} - j_{sa} - j_{sa}^{ik} \leq j_s \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$

$k - j_{sa}^{ik} - 1 = l_s \wedge l_{sa} \wedge j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$((D > n < n) \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 7 \wedge s = s + k \wedge$

$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k \wedge$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\}$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s} \sum_{(j_{sa}=j_{ik}+l_{sa}-l_{ik})}^{()} \sum_{j_i=j_{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{(\)} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_2}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - k_1 - k_2 - k_3 - j_{sa}^s)!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k - 1)! \cdot (l_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - l_i - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} - j_{sa}^{ik} - j_{sa}$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j_i + s - j_{sa} \leq j_i - n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_i = l_{ik} \wedge l_{sa} - s = l_{sa} \wedge$

$((D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 7 \wedge s = s + k \wedge$

$k_2: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k \wedge$

$k_2: z = 2 \wedge k = k_2 + k_3) \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

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$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)}$$

$$\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}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^s)!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

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$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z^D \sum_{j_s, \dots, j_{sa}, j_i} = \sum_{k=0}^{(l_s - s + 2)} \sum_{j_s = l_{sa} + n - D - j_{sa} + 1}^{(l_s - s + 2)}$$

$$\sum_{j_{ik} = l_{ik} - l_s}^{(j_{sa} - k + l_{sa} - l_{ik})} \sum_{j_i = j_{sa} + l_i - l_{sa}}$$

$$\sum_{n+k}^n \sum_{(n_{is} = n+k - j_s + 1)}^{(j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)}^{(j_s + 1)} \sum_{n_s = n_{sa} + j_{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n + j_s + j_{sa}^{ik} - j_{ik} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^s)!}{n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s}^{()} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{()} \sum_{j_i=l_{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{()}$$

$$\sum_{(n_{is}=n_{ik}+j_{ik}-l_{sa}-\mathbb{k}_2)}^{()} \sum_{(n_s=n_{sa}+j_s-j_i-\mathbb{k}_3)}^{()}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n_i + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > l_i > n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_s^{ik} + 1 \wedge j_s \leq j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} - j_{sa} - j_{sa}^{ik} \leq j^{sa} \wedge j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} - 1 = l_s \wedge l_{sa} \wedge j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D > n < n \wedge l_s > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

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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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$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, \dots, j_{sa}^i\} \wedge$$

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$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

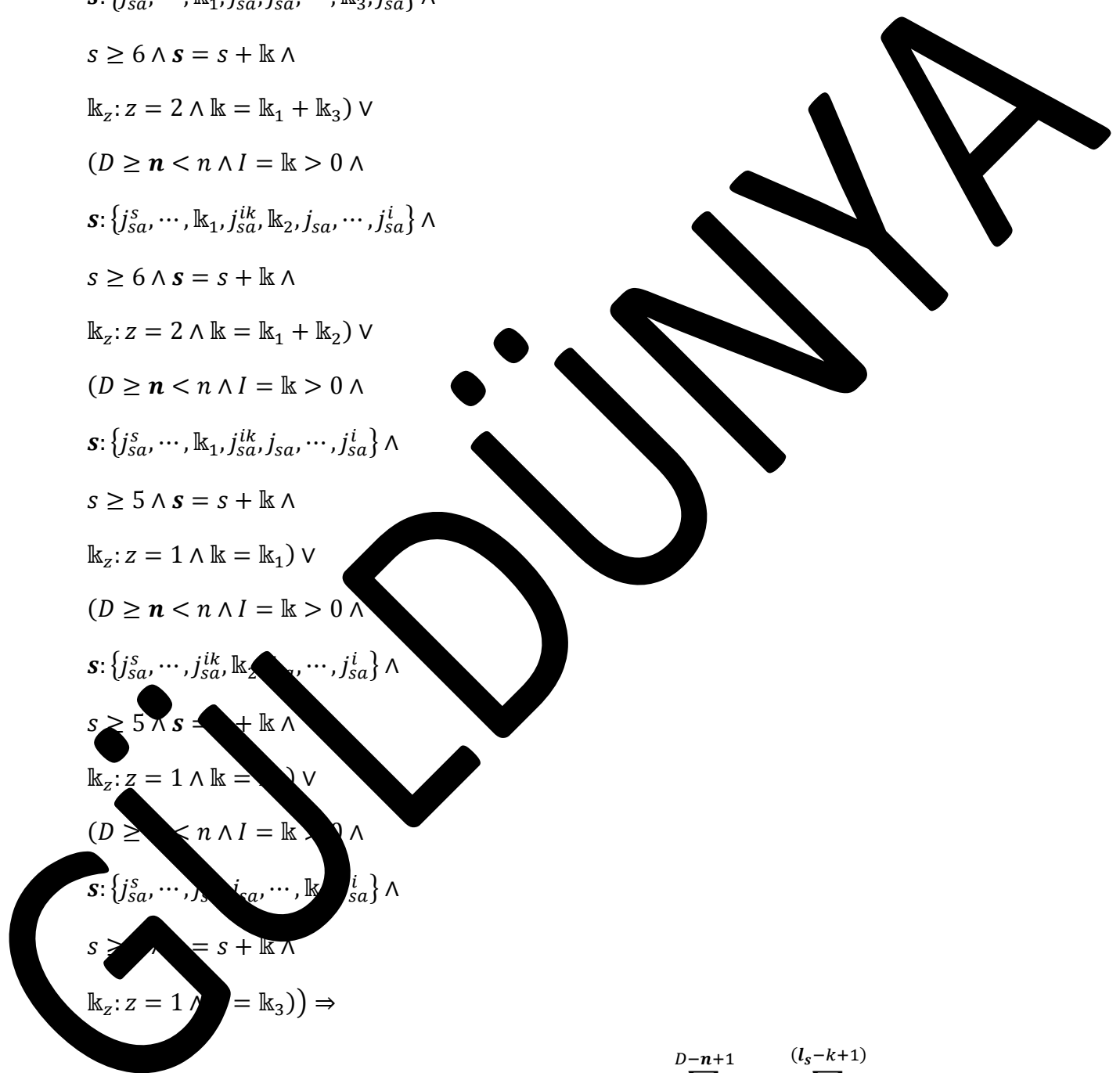
$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_1, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \Rightarrow$$

$$f_z^{DSD} S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_s-k+1)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s} \sum_{(j_{sa}=j_{ik}+l_{sa}-l_{ik})} \sum_{j_i=j_{sa}+l_i-l_{sa}}$$



$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{(\quad)} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_2}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - k_1 - k_2 - k_3 - j_{sa}^s)!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k - 1)! \cdot (l_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - l_i - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} - j_{sa}^{ik} - j_{sa}$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j_i + s - j_{sa} \leq j_i < n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_i = l_{ik} \wedge l_{sa} - j_{sa} - s = l_{ik} \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

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$$j_{sa}^{DSD} j_{ik} j_{sa}^{j_i} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_i-k-s+2)}$$

$$\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}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

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$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

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$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

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$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$f_z^S j_s^D j_{sa}^{sa, j_i} = \sum_{k=0}^{(l_{sa} - j_{sa} + 2)} \sum_{j_s = l_{ik} + n - D - j_{sa}^{ik} + 1}^{(j_s = l_{ik} + n - D - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik} = l_{ik} - l_s}^{(j_{sa} - l_{ik} + l_{sa} - l_{ik})} \sum_{j_i = j_{sa} + l_i - l_{sa}}^{(j_s + 1)}$$

$$\sum_{n + \mathbb{k}}^{n} \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)}^{(j_s + 1)} \sum_{n_s = n_{sa} + j_{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$s \geq 5 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_s-k+1)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})} \sum_{j_i=l_{ik}+l_i-l_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{is}=n_{ik}+j_{ik}-l_{sa}-\mathbb{k}_2)}^{(n_{is}=n_{ik}+j_{ik}-l_{sa}-\mathbb{k}_2)} \sum_{n_s=n_{sa}+j_i-j_{ik}}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n_i + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > l_s + n + 1 \wedge$

$z = j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} - j_{sa}^{ik} - j_{sa}^{ik} \leq j^{sa} + j_i + j_{sa}^{ik} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} = l_s \wedge l_{sa}^{ik} - j_{sa}^{ik} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$((D > n < n \wedge l_s > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$7 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$

$(D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_1, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_i-k-s+2)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s} \sum_{(j_{sa}=j_{ik}+l_{sa}-l_{ik})}^{()} \sum_{j_i=j_{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{i_s}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{i_s}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{(\)} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_2}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - k_1 - k_2 - k_3 - j_{sa}^s)!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k - 1)! \cdot (l_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - l_i - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} - j_{sa}^{ik} - j_{sa}$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j_i + s - j_{sa} \leq j_i - n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_i = l_{ik} \wedge l_{sa} - j_{sa} - s = l_{ik} \wedge$

$((D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 7 \wedge s = s + k \wedge$

$k_2: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k \wedge$

$k_2: z = 2 \wedge k = k_2 + k_3) \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$s: \{j_{sa}, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k \wedge$

$k_2: z = 2 \wedge k = k_1 + k_3) \vee$

$(D \geq n < n \wedge I = k > 0 \wedge$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$fz S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_{sa}-k-j_{sa}+2)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s} \sum_{(j_{sa}=j_{ik}+l_{sa}-l_{ik})}^{()} \sum_{j_i=j_{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^s)!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$\sum_{j_{ik}=1}^{DSD} \sum_{j_{sa}=1}^{j_{ik}-j_{sa}^{ik}+2} \sum_{k=1}^{j_{sa}+l_i-l_{sa}} (j_s = l_s + n - D)$$

$$\sum_{j_{ik}=l_{ik}-l_s}^{(j_{sa}+l_i-l_{sa}-l_{ik})} \sum_{j_i=j_{sa}+l_i-l_{sa}}^{(j_s+1)}$$

$$\sum_{n+\mathbb{k}}^n (n_{is}=n+\mathbb{k}-j_s+1) \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3)}$$

$$\frac{(l_i + j_s + j_{sa}^{ik} - j_{ik} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^s)!}{n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1)) \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z^{DSD} \sum_{k=0}^{D+l_s+s-l_i} \sum_{(i_s=j_s+k+l_s-l_{ik})} \binom{D+l_s+s-l_i}{k} \sum_{j_i=l_i+n-D}^{l_{sa}+s-k-j_{sa}+1} \sum_{j_i=j_i+j_{sa}-s} \sum_{j_i=l_i+n-D} \binom{n_i-j_i-1}{j_i} \sum_{i=n+\mathbb{k}}^{(n_{is}=n+\mathbb{k}-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \binom{()}{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3} \frac{(n_i + j_{sa}^{ik} - j_{ik} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^s)!}{(n_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1)) \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = \mathbf{s} + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq \mathbf{n} < n \wedge l = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = \mathbf{s} + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_{j_s, j_{ik}, j_{sa}, j_i}^{S_{DSD}} = \sum_{l_i=1}^{D+l_s+s-n-l_i} \binom{D+l_s+s-n-l_i}{j_s=j_{ik}-l_i} \sum_{l_{ik}=j_{ik}-l_{sa}}^{l_{ik}+s-k-j_{sa}^{ik}+1} \binom{l_{ik}+s-k-j_{sa}^{ik}+1}{j_i+j_{sa}} \sum_{n_i=n+l_k}^n \binom{n_i-j_s+1}{n_i=n+l_k} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}}^{n_{ik}=n_{is}+j_s+1} \binom{n_{ik}=n_{is}+j_s+1}{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{n_s=n_{sa}+j_{sa}-j_i-l_{k_3}}^{n_s=n_{sa}+j_{sa}-l_{k_2}} \binom{n_s=n_{sa}+j_{sa}-l_{k_2}}{n_s=n_{sa}+j_{sa}-j_i-l_{k_3}} \frac{(n_i+j_s+j_{sa}^{ik}-j_{ik}-s-l_{k_1}-l_{k_2}-l_{k_3}-j_{sa}^s)!}{(n_i-n-l_{k_1}-l_{k_2}-l_{k_3})! \cdot (n+j_s+j_{sa}^{ik}-j_{ik}-s-j_{sa}^s)!} \cdot \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!}$$

$$((D > \mathbf{n} < n \wedge l_s = n - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$fz S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \binom{D+l_s+s-n-l_i}{j_s+l_s+l_s-l_{ik}} \sum_{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}^{l_{ik}+s-j_{sa}^{ik}+1} \binom{l_{ik}+s-j_{sa}^{ik}+1}{j_i=l_i+n} \sum_{n_i=1}^n \binom{n}{n_i} \binom{n_i}{n_i-s+l_i+1} \binom{n_i}{n_i-l_{ik}} \binom{n_i}{n_i-l_{ik}-\mathbb{k}_1} \binom{n_i}{n_i-l_{ik}-\mathbb{k}_2} \binom{n_i}{n_i-l_{ik}-\mathbb{k}_3} \binom{n_i}{n_i-l_{ik}-j_{sa}^s} \binom{n_i}{n_i-l_{ik}-j_{sa}^i} \binom{n_i}{n_i-l_{ik}-j_{sa}^j} \binom{n_i}{n_i-l_{ik}-j_{sa}^k} \binom{n_i}{n_i-l_{ik}-j_{sa}^l} \binom{n_i}{n_i-l_{ik}-j_{sa}^m} \binom{n_i}{n_i-l_{ik}-j_{sa}^n} \binom{n_i}{n_i-l_{ik}-j_{sa}^o} \binom{n_i}{n_i-l_{ik}-j_{sa}^p} \binom{n_i}{n_i-l_{ik}-j_{sa}^q} \binom{n_i}{n_i-l_{ik}-j_{sa}^r} \binom{n_i}{n_i-l_{ik}-j_{sa}^s} \binom{n_i}{n_i-l_{ik}-j_{sa}^t} \binom{n_i}{n_i-l_{ik}-j_{sa}^u} \binom{n_i}{n_i-l_{ik}-j_{sa}^v} \binom{n_i}{n_i-l_{ik}-j_{sa}^w} \binom{n_i}{n_i-l_{ik}-j_{sa}^x} \binom{n_i}{n_i-l_{ik}-j_{sa}^y} \binom{n_i}{n_i-l_{ik}-j_{sa}^z} \binom{n_i}{n_i-l_{ik}-j_{sa}^{\mathbb{k}_1}} \binom{n_i}{n_i-l_{ik}-j_{sa}^{\mathbb{k}_2}} \binom{n_i}{n_i-l_{ik}-j_{sa}^{\mathbb{k}_3}} \binom{n_i}{n_i-l_{ik}-j_{sa}^{\mathbb{k}_4}} \binom{n_i}{n_i-l_{ik}-j_{sa}^{\mathbb{k}_5}} \binom{n_i}{n_i-l_{ik}-j_{sa}^{\mathbb{k}_6}} \binom{n_i}{n_i-l_{ik}-j_{sa}^{\mathbb{k}_7}} \binom{n_i}{n_i-l_{ik}-j_{sa}^{\mathbb{k}_8}} \binom{n_i}{n_i-l_{ik}-j_{sa}^{\mathbb{k}_9}} \binom{n_i}{n_i-l_{ik}-j_{sa}^{\mathbb{k}_{10}}}$$

$$((D - n < n \wedge l_s > n + 1 \wedge$$

$$z \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$z \leq j_s \leq n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$(D + s - n < l_i \leq D + l_s + s - n - 1)) \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}+l_s-l_i)}^{()} \sum_{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}^{()} \sum_{(j_{sa}=j_i+j_{sa})}^{()} \sum_{i=l_i}^{()} \sum_{(n_i=n+\mathbb{k})}^{()} \sum_{(n_i-j_s+1)}^{()} \sum_{(n_i+1)}^{()} \sum_{(n_{sa}=n_{ik}+j_{sa}-j_{sa}^{ik}-\mathbb{k}_2)}^{()} \sum_{(n_{sa}+j_{sa}-j_i-\mathbb{k}_3)}^{()} \frac{(n_i + j_s + j_{sa} - j_{ik} - s - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^s)!}{(n_i - \mathbb{k}_2 - \dots)! \cdot (n + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge \dots > D - \dots + 1 \wedge$$

$$2 \leq j_{sa} \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < \dots, l_s \leq D - n + 1 \wedge$$

$$j_{sa} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1)) \wedge$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i}^{DSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()} \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{()} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{()} \sum_{(l_i=n-D)}^{l_s+s-k} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})} \sum_{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) n_s} \sum_{(j_i-\mathbb{k}_3)} \frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - \mathbb{k}_1 - \mathbb{k}_3 - j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n_i + j_s + j_{sa}^{ik} - j_{ik} - s - j_{sa}^s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} - j_{sa}^{ik} - j_{sa} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \wedge$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_1) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3)) \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()} \sum_{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}^{()} \sum_{(j_{sa}=j_i+l_i-l_{sa})}^{()} \sum_{j_i=l_i+n-l_{ik_1}}^{l_s+s-k} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{is}=n+k-l_{k_1}}^{(n_{is}-n_{is}+1)} \sum_{(n_{sa}=n_{is}-l_{k_2})}^{()} \sum_{n_s=n_{is}+j_{sa}-j_i-l_{k_3}}^{()} \frac{(n_i + j_{sa}^{ik} - j_{sa} - s - l_{k_2} - l_{k_3})!}{(n_i - n - l_{k_1} - l_{k_2} - l_{k_3})! \cdot (n + j_{sa}^{ik} - j_{ik} - s - j_{sa})!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1) \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} - 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1) \wedge$$

$$1 \leq j_s < j_{ik} - j_{sa}^{ik} - 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$(D + s - n < l_i \leq D + l_s + s - n - 1)) \wedge$$

$$((D \geq n < n \wedge l = k > 0) \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

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$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_2) \vee$$

$$(D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge k = k_3) \Rightarrow$$

$$fz_{j_s, j_{ik}, j^{sa}, j_i}^{DSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{()} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{()} \sum_{j_i=l_i+n}^{l_s+s-k}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}}^{()} \sum_{j_{ik}=k_1}^{()}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{sa})}^{()} \sum_{(n_s=n_{sa}+j^{sa}-j_i)}^{()}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - k_2 - l_{sa} - j_{sa}^s)!}{(n_i - n - k_1 - k_2 - l_{sa})! \cdot (n_i + j_s + j_{sa}^{ik} - j_{ik} - k_2 - l_{sa} - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)!}{(j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > D - l_i - 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa}^{ik} \leq j^{sa} \wedge j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa}^{ik} = j^{sa} \wedge j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$(j_s + s - 1 < l_i \leq D + l_s + s - n - 1)) \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\}$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz_{j_s, j_{ik}, j^{sa}, j_i}^{DSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{()} \sum_{j_i=l_i+n-D}^{l_s+s-k}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{i_k}=n_{i_s}-j_{ik}-l_{k_1}}$$

$$\sum_{(n_{sa}=n_{i_k}+j_{ik}-j^{sa}-l_{k_2})}^{()} \sum_{(n_s=n_{sa}+j^{sa}-j_i)}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - l_{k_2} - l_{k_1} - j_{sa}^s)!}{(n_i - n - l_{k_1} - l_{k_2} - l_{k_3})! \cdot (n_i + j_s + j_{sa}^{ik} - j_{ik} - l_{k_2} - l_{k_1} - j_{sa}^s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - l_{k_1} + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > D - l_i - 1) \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa}^{ik} \leq j^{sa} + j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa}^{ik} = j^{sa} + j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$(D + s - 1 < l_i \leq D + l_s + s - n - 1)) \wedge$$

$$((D \geq n < n \wedge I = l_k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, l_{k_2}, j_{sa}, \dots, l_{k_3}, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + l_k \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\}$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz_{j_s, j_{ik}, j^{sa}, j_i}^{DSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{()} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{()} \sum_{j_i=l_i+n}^{l_s+s-k}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}}^{()} \sum_{j_{ik}=k_1}^{()}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{sa})}^{()} \sum_{(n_s=n_{sa}+j^{sa}-j_i)}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - \mathbb{k}_2 - l_{sa} - j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n_i + j_s + j_{sa}^{ik} - j_{ik} - \mathbb{k}_2 - l_{sa} - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)!}{(j_s - 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > D - l_i - 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa}^{ik} \leq j^{sa} + j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa}^{ik} = j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$(j_s + s - 1 < l_i \leq D + l_s + s - n - 1)) \wedge$$

$$((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()} \sum_{j_{ik}=j_{sa}^{sa}+j_{sa}^{ik}-j_{sa}}^{()} \sum_{(j_{sa}^{sa}=j_i+l_{sa}-l_i)}^{()} \sum_{j_i=l_i+n-k}^{l_s+s-k} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-k_1}^{()} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{sa}-k_2)}^{()} \sum_{n_{sa}=n_{sa}+j_{sa}^{sa}-j_i}^{()} \frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - k_2 - k_1 - j_{sa}^s)!}{(n_i - n - k_1 - k_2 - \dots)! \cdot (n_{sa}^{sa} + j_{sa}^{sa} - j_{sa}^s)!} \cdot \frac{(j_s - k - 1)!}{(j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\begin{aligned} & ((D \geq n < n \wedge l_s > D - n - 1 \wedge \\ & 2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{sa} - 1 \leq j_{ik} \leq j_{sa}^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa}^{sa} - j_{sa}^{ik} \leq j_{sa}^{sa} + j_i + j_{sa} - s \wedge j_{sa}^{sa} + s - j_{sa} \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee \\ & (D \geq n < n \wedge l_s \leq D - n - 1 \wedge \\ & 1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{sa} - 1 \leq j_{ik} \leq j_{sa}^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa}^{sa} - j_{sa}^{ik} \leq j_{sa}^{sa} + j_i + j_{sa} - s \wedge j_{sa}^{sa} + s - j_{sa} \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge \\ & (D - l_s - 1 < l_i \leq D + l_s + s - n - 1)) \wedge \end{aligned}$$

$$\begin{aligned} & ((D \geq n < n \wedge I = k > 0 \wedge \\ & s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge \\ & s \geq 7 \wedge s = s + k \wedge \end{aligned}$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \binom{D+l_s+s-n-l_i}{j_s=j_{ik}+l_s-l_{ik}} \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{(l_{sa}-k+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{(n-j_s+1)} \sum_{n_i=n+k}^n \sum_{n_{is}=n+k-j_s+1}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-k_1}^{(n_i-j_s+1)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{(n_s=n_{sa}+j^{sa}-j_{sa}-k_3)} \frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - k_2 - k_3 - j_{sa}^s)!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (n_i + j_s + j_{sa}^{ik} - j_{ik} - k_2 - k_3 - j_{sa}^s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\begin{aligned} & ((D \geq n < n \wedge l_s > D - n + 1 \wedge \\ & 2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa}^{ik} - j_{sa}^{ik} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee \\ & (D \geq n < n \wedge l_s \leq D - n + 1 \wedge \\ & 2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa}^{ik} - j_{sa}^{ik} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge \\ & (D + s - n - l_i \leq D + l_s + s - n - 1)) \wedge \\ & ((D \geq n < n \wedge l = k > 0 \wedge \\ & s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge \\ & s \geq 7 \wedge s = s + k \wedge \end{aligned}$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

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$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz_{j_s, j_{ik}, j^{sa}, j_i}^{DSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()} \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{(l_{ik}+j_{sa}-k-j_{sa}^{ik}+1)} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)} \sum_{j_i=j^{sa}+s-j_{sa}} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-k_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i} \frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - k_2 - k_3 - j_{sa}^s)!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (n_i + j_s + j_{sa}^{ik} - j_{ik} - k_2 - k_3 - j_{sa}^s)!} \cdot \frac{(n_i - j_s - k_1 - k_2 - k_3 - 1)!}{(n_i - j_s - k_1 - k_2 - k_3 + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\begin{aligned} & ((D \geq n < n \wedge l_s > D - n - 1) \wedge \\ & 2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa}^{ik} - j_{sa}^{ik} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee \\ & ((D \geq n < n \wedge l_s \leq D - n - 1) \wedge \\ & 1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa}^{ik} - j_{sa}^{ik} = j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge \\ & (j_s - 1 < l_i \leq D + l_s + s - n - 1)) \wedge \end{aligned}$$

$$\begin{aligned} & ((D \geq n < n \wedge I = k > 0 \wedge \\ & s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge \end{aligned}$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz_{j_s, j_{ik}, j^{sa}, j_i}^{DSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \binom{D+l_s+s-n-l_i}{j_s=j_{ik}+l_s-l_{ik}} \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(l_{ik}+j_{sa}-k-j_{sa}^{ik}+1)} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)} \sum_{j_i=j^{sa}+l_i-j_{sa}} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{ik}-k_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_{sa}=n_{sa}+j^{sa}-j_i} \frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - k_2 - k_1 - j_{sa}^s)!}{(n_i - n - k_1 - k_2 - j_{sa}^s)! \cdot (n_i + j_{sa}^{ik} - j_{sa}^s)!} \cdot \frac{(j_s - k - 1)!}{(j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > D - n - 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} + j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n - 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} + j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$(l_s \leq l_i \leq D + l_s + s - n - 1)) \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

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$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

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$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\}$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz_{j_s, j_{ik}, j^{sa}, j_i}^{DSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()} \sum_{j_{ik}=j^{sa}+j_{sa}^{lk}-j_{sa}}^{(l_{ik}+j_{sa}-k-j_{sa}^{ik}+1)} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)} \sum_{j_i=j^{sa}+s-j_{sa}} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-k_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{n_{sa}=n_{sa}+j^{sa}-j_i} \frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - k_2 - k_1 - j_{sa}^s)!}{(n_i - n - k_1 - k_2 - \dots)! \cdot (n_i + j_{sa} - j_{sa} - j_{sa}^s)!} \cdot \frac{(j_s - k - 1)!}{(j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\begin{aligned} & ((D \geq n < n \wedge l_s > D - n - 1 \wedge \\ & 2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{lk} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} + j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{lk} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee \\ & (D \geq n < n \wedge l_s \leq D - n - 1 \wedge \\ & 1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{lk} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} + j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{lk} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge \\ & (D - l_s - 1 \leq l_i \leq D + l_s + s - n - 1)) \wedge \end{aligned}$$

$$\begin{aligned} & ((D \geq n < n \wedge I = k > 0 \wedge \\ & s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge \\ & s \geq 7 \wedge s = s + k \wedge \end{aligned}$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz_{j_s, j_{ik}, j^{sa}, j_i}^{DSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \binom{D+l_s+s-n-l_i}{j_s=j_{ik}+l_s-l_{ik}} \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{(l_s+j_{sa}-k)} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)} \sum_{j_i=j^{sa}+s-j_{sa}} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-k_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{(n_s=n_{sa}+j^{sa}-j_{sa}-k_3)} \frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - k_2 - k_3 - j_{sa}^s)!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (n_i + j_s + j_{sa}^{ik} - j_{ik} - k_2 - k_3 - j_{sa}^s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\begin{aligned} & ((D \geq n < n \wedge l_s > D - n + 1 \wedge \\ & 2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa}^{ik} - j_{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee \\ & (D \geq n < n \wedge l_s \leq D - n + 1 \wedge \\ & 2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa}^{ik} - j_{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge \\ & (D + s - n - l_i \leq D + l_s + s - n - 1)) \wedge \\ & ((D \geq n < n \wedge l = k > 0 \wedge \end{aligned}$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\}$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz_{j_s, j_{ik}, j^{sa}, j_i}^{DSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()} \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(l_s+j_{sa}-k)} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)} \sum_{j_i=j^{sa}+l_i-l_{ik}} \sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{i_k}=n_{i_s}-j_{ik}-l_{k_1}} \sum_{(n_{sa}=n_{i_k}+j_{ik}-j^{sa}-l_{k_2})}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i} \frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - l_{k_2} - l_{k_1} - j_{sa}^s)!}{(n_i - n - l_{k_1} - l_{k_2} - l_{k_3})! \cdot (n_i - j_s + j_{sa}^{ik} - j_{ik} - l_{k_2} - l_{k_1} - j_{sa}^s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - l_{k_1} + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\begin{aligned} & ((D \geq n < n \wedge l_s > D - l_i - 1) \wedge \\ & 2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa}^{ik} - j_{sa}^{ik} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee \\ & ((D \geq n < n \wedge l_s \leq D - n + 1) \wedge \\ & 2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa}^{ik} - j_{sa}^{ik} = j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge \\ & (l_i + s - 1 < l_i \leq D + l_s + s - n - 1)) \wedge \\ & ((D \geq n < n \wedge l = l > 0 \wedge \end{aligned}$$

$$s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, l_{k_2}, j_{sa}, \dots, l_{k_3}, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + l_k \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\}$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz_{j_s, j_{ik}, j^{sa}, j_i}^{DSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()} \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{(l_s+j_{sa}-k)} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)} \sum_{j_i=j^{sa}+l_i-1} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-1)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i} \frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n_i + j_s + j_{sa}^{ik} - j_{ik} - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\begin{aligned} & ((D \geq n < n \wedge l_s > D - l_i - 1 \wedge \\ & 2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa}^{ik} - j_{sa}^{ik} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee \\ & ((D \geq n < n \wedge l_s \leq D - n + 1 \wedge \\ & 1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa}^{ik} - j_{sa}^{ik} = j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge \\ & (j_s - 1 < l_i \leq D + l_s + s - n - 1)) \wedge \end{aligned}$$

$$\begin{aligned} & ((D \geq n < n \wedge I = \mathbb{k} > 0 \wedge \\ & s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge \\ & s \geq 7 \wedge s = s + \mathbb{k} \wedge \end{aligned}$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz_{j_s, j_{ik}, j^{sa}, j_i}^{DSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(l_s+j_{sa}-k)} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)} \sum_{j_i=j^{sa}+s-j_{sa}}^{()}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{i_s}-j_{ik}-l_{k_1}}^{()}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{()}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - l_{k_2} - l_{k_1} - j_{sa}^s)!}{(n_i - n - l_{k_1} - l_{k_2} - l_{k_3})! \cdot (n_i + j_s + j_{sa}^{ik} - j_{ik} - l_{k_2} - l_{k_1} - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)!}{(n_i - j_s - l_{k_1} + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > D - l_i - 1) \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa}^{ik} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa}^{ik} = j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$(j_i + s - l_i \leq D + l_s + s - n - 1)) \wedge$$

$$((D \geq n < n \wedge l_s = l_i > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, l_{k_2}, j_{sa}, \dots, l_{k_3}, j_{sa}^i\} \wedge$$

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$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\}$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz_{j_s, j_{ik}, j^{sa}, j_i}^{DSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()} \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{(l_s+j_{sa}-k)} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)} \sum_{j_i=j^{sa}+s-j_{sa}^{ik}} \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-l_{k_1}} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i} \frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - l_{k_2} - l_{k_3} - j_{sa}^i)!}{(n_i - n - l_{k_1} - l_{k_2} - l_{k_3})! \cdot (n_i + j_s + j_{sa}^{ik} - j_{ik} - l_{k_2} - l_{k_3} - j_{sa}^i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - l_{k_1} + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\begin{aligned} & ((D \geq n < n \wedge l_s > D - l_i - 1) \wedge \\ & 2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa}^{ik} - j_{sa}^{ik} \leq j^{sa} \wedge j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee \\ & ((D \geq n < n \wedge l_s \leq D - n + 1) \wedge \\ & 1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa}^{ik} - j_{sa}^{ik} \leq j^{sa} \wedge j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge \\ & (j_s - 1 < l_i \leq D + l_s + s - n - 1)) \wedge \end{aligned}$$

$$\begin{aligned} & ((D \geq n < n \wedge I = l_k > 0 \wedge \\ & s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, l_{k_2}, j_{sa}, \dots, l_{k_3}, j_{sa}^i\} \wedge \\ & s \geq 7 \wedge s = s + l_k \wedge \end{aligned}$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz_{j_s, j_{ik}, j^{sa}, j_i}^{DSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()} \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(l_s+j_{sa}-k)} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)}^{()} \sum_{j_i=j^{sa}+l_i-1}^{()} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-k_1}^{()} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2-k_3)}^{()} \sum_{n_{is}=n_{sa}+j^{sa}-j_i}^{()} \frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - k_2 - k_3 - j_{sa}^s)!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (n_i + j_s + j_{sa}^{ik} - j_{ik} - k_2 - k_3 - j_{sa}^s)!} \cdot \frac{(n_i - j_s + 1)! \cdot (j_s - k - 1)!}{(n_i - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > D - n - 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} + j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} + j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$(l_s < l_i \leq D + l_s + s - n - 1)) \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i}^{DSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()} \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_{sa}+j_{sa}^{ik}-k-j_{sa}+1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{()} \sum_{j_i=j^{sa}+s-j_{sa}}^{(n_i-j_s+1)}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-k_1}^{(n_i-j_s+1)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2-k_3-j_s)}^{(n_i-j_s+1)} \sum_{(n_{sa}=n_{sa}+j^{sa}-j_i)}^{(n_i-j_s+1)}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - k_2 - k_3 - j_{sa}^s)!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (n_{is} + j_{sa}^{ik} - j_{sa}^s - j_s)!} \cdot \frac{(n_{ik} - k_1 - 1)!}{(n_{is} - j_s - 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > D - n - 1) \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa}^{ik} \leq j^{sa} + j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n - 1) \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa}^{ik} = j^{sa} + j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$(D - l_s - 1 < l_i \leq D + l_s + s - n - 1)) \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\}$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i}^{DSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()} \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_{ik}-k+1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{()} \sum_{j_i=j^{sa}+s-j_i}^{()} \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-l_{k_1}}^{()} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{()} \frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - l_{k_2} - l_{k_1} - j_{sa}^s)!}{(n_i - n - l_{k_1} - l_{k_2} - l_{k_3})! \cdot (n_i + j_s + j_{sa}^{ik} - j_{ik} - l_{k_2} - l_{k_1} - j_{sa}^s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - l_{k_1} + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > D - l_i - 1) \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa}^{ik} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1) \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa}^{ik} = j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$(D \geq n < n \wedge l_i \leq D + l_s + s - n - 1)) \wedge$$

$$((D \geq n < n \wedge I = l_k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, l_{k_2}, j_{sa}, \dots, l_{k_3}, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + l_k \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

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$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\}$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz_{j_s, j_{ik}, j^{sa}, j_i}^{DSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \binom{D+l_s+s-n-l_i}{j_s=j_{ik}+l_s-l_{ik}} \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_{ik}-k+1} \binom{D+l_s+s-n-l_i}{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \sum_{j_i=j^{sa}+l_i-l_{ik}}^{(n_i-j_s+1)} \binom{n_i-j_s+1}{n_i=n+l_k} \binom{n_i-j_s+1}{n_{is}=n+l_k-j_s+1} \binom{n_i-j_s+1}{n_{ik}=n_{is}-j_{ik}-l_{k1}} \binom{n_i-j_s+1}{n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k2}} \binom{n_i-j_s+1}{n_s=n_{sa}+j^{sa}-j_i} \frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - l_{k2} - l_{k1} - j_{sa}^s)!}{(n_i - n - l_{k1} - l_{k2} - l_{k3})! \cdot (n_i - j_s + j_{sa}^{ik} - j_{ik} - l_{k2} - l_{k1} - j_{sa}^s)!} \cdot \frac{(n_i - j_s - l_{k1} - l_{k2} - l_{k3} - 1)!}{(n_i - j_s - l_{k1} - l_{k2} - l_{k3} + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\begin{aligned} & ((D \geq n < n \wedge l_s > D - l_i - 1 \wedge \\ & 2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa}^{ik} - j_{sa}^{ik} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee \\ & ((D \geq n < n \wedge l_s \leq D - n + 1 \wedge \\ & 1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa}^{ik} - j_{sa}^{ik} = j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge \\ & (j_s - 1 < l_i \leq D + l_s + s - n - 1)) \wedge \end{aligned}$$

$$\begin{aligned} & ((D \geq n < n \wedge I = l_k > 0 \wedge \\ & s: \{j_{sa}^s, \dots, l_{k1}, j_{sa}^{ik}, l_{k2}, j_{sa}, \dots, l_{k3}, j_{sa}^i\} \wedge \\ & s \geq 7 \wedge s = s + l_k \wedge \end{aligned}$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\}$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz_{j_s, j_{ik}, j^{sa}, j_i}^{DSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \binom{D+l_s+s-n-l_i}{j_s=j_{ik}+l_s-l_{ik}} \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_{ik}-k+1} \binom{D+l_s+s-n-l_i}{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \sum_{j_i=j^{sa}+s-j_{sa}}^{n-j_{sa}+1} \binom{n-j_{sa}+1}{n_i=n+l_k} \binom{n_i-j_s+1}{n_{is}=n+l_k-j_s+1} \binom{n-l_{ik}}{n_{ik}=n_{is}-j_{ik}-l_{k1}} \binom{n-l_{ik}}{n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k2}} \binom{n-l_{ik}}{n_s=n_{sa}+j^{sa}-j_i} \frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - l_{k2} - l_{k1} - j_{sa}^s)!}{(n_i - n - l_{k1} - l_{k2} - l_{k3})! \cdot (n_i + j_s + j_{sa}^{ik} - j_{ik} - l_{k2} - l_{k1} - j_{sa}^s)!} \cdot \frac{(n - j_s - l_{k1} - l_{k2} - l_{k3} - 1)!}{(n - j_s - l_{k1} - l_{k2} - l_{k3} + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > D - l_i - 1) \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa}^{ik} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa}^{ik} = j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$(j_s + s - 1 < l_i \leq D + l_s + s - n - 1)) \wedge$$

$$((D \geq n < n \wedge I = l_k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, l_{k1}, j_{sa}^{ik}, l_{k2}, j_{sa}, \dots, l_{k3}, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + l_k \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i}^{DSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \binom{D+l_s+s-n-l_i}{j_s=j_{ik}+l_s-l_{ik}} \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-k} \binom{D+l_s+s-n-l_i}{j_i=j^{sa}+s-j_{ik}} \sum_{n_i=n+k}^n \binom{n_i-j_s+1}{n_{is}=n+k-j_s+1} \sum_{n_{ik}=n_{is}-j_{ik}-k_1}^{n_{ik}=n_{is}-j_{ik}-k_1} \binom{n_i-j_s+1}{n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2-k_3-j_s} \sum_{n_{sa}=n_{sa}+j^{sa}-j_i}^{n_{sa}=n_{sa}+j^{sa}-j_i} \binom{n_i-j_s+1}{n_{sa}=n_{sa}+j^{sa}-j_i} \frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - k_2 - k_3 - j_{sa})!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (n_{is} + j_{sa}^{ik} - j_s - j_{sa})!} \frac{(n_{ik} - k_1 - k_2 - k_3 - 1)!}{(n_{is} - j_s - k_1 - k_2 - k_3 + 1)! \cdot (j_s - 2)!} \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\begin{aligned} & ((D \geq n < n \wedge l_s > D - n - 1 \wedge \\ & 2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa}^{ik} - j_{sa}^{ik} \leq j^{sa} + j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee \\ & (D \geq n < n \wedge l_s \leq D - n - 1 \wedge \\ & 1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa}^{ik} - j_{sa}^{ik} = j^{sa} + j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge \\ & (l_s - 1 < l_i \leq D + l_s + s - n - 1)) \wedge \end{aligned}$$

$$\begin{aligned} & ((D \geq n < n \wedge I = k > 0 \wedge \\ & s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge \\ & s \geq 7 \wedge s = s + k \wedge \end{aligned}$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i}^{DSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()} \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-k} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j^{sa}+l_i-l_{ik_1}}^{(n_i-j_s+1)} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-k_1}^{(n_i-j_s+1)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{(n_i-j_s+1)} \sum_{n_{is}=n_{sa}+j_{sa}-j_i}^{(n_i-j_s+1)} \frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - k_2 - k_1 - j_{sa}^s)!}{(n_i - n - k_1 - k_2 - \dots)! \cdot (n_i + j_{sa}^{ik} - j_{ik} - k_2 - k_1 - j_{sa}^s)!} \cdot \frac{(n_i - j_s - k - 1)!}{(n_i - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\begin{aligned} & ((D \geq n < n \wedge l_s > D - n - 1 \wedge \\ & 2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} + j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee \\ & (D \geq n < n \wedge l_s \leq D - n - 1 \wedge \\ & 1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} + j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge \\ & (D - l_s - 1 < l_i \leq D + l_s + s - n - 1)) \wedge \\ & ((D \geq n < n \wedge I = k > 0 \wedge \end{aligned}$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\}$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-k} \sum_{(j_{sa}=j_{ik}+l_{sa}-l_{ik})}^{()} \sum_{j_i=j_{sa}+l_i-1}^{()}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+l_{ik}-j_{ik}-k_1}^{()}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-k_2)}^{()} \sum_{(n_{sa}+j_{sa}-j_i)}^{()}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - k_1 - k_2 - l_{sa} - l_{ik} - j_{sa}^s)!}{(n_i - n - k_1 - k_2 - l_{sa} - l_{ik} - j_{sa}^s)! \cdot (n_i + j_{sa} - j_i - j_{sa}^s)!}$$

$$\frac{(j_s - k - 1)!}{(j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > D - n - 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$(j_s < l_i \leq D + l_s + s - n - 1)) \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-k} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j_{sa}+s-j_{sa}^{ik}}^{()}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-k_1}^{()}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-k_2-k_3-j_s)}^{()} \sum_{(n_s=n_{sa}+j_{sa}^{ik}-j_i)}^{()}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - k_2 - k_3 - j_{sa}^s)!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (n_i + j_{sa}^{ik} - j_{sa}^{ik} - j_{sa}^s)!}$$

$$\frac{(n_i - j_s - k_1 - k_2 - k_3 - 1)!}{(n_i - j_s - k_1 - k_2 - k_3 + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > D - n - 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa}^{ik} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa}^{ik} \leq j_i + j_{sa} - s \wedge j_{sa}^{ik} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa}^{ik} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa}^{ik} \leq j_i + j_{sa} - s \wedge j_{sa}^{ik} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$(l_s < l_i \leq D + l_s + s - n - 1)) \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\}$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz_{j_s, j_{ik}, j^{sa}, j_i}^{DSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-k} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{()} \sum_{j_i=j^{sa}+s-1}^{()}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+l_{ik}-j_{ik}-k_1}^{()}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{(n_{sa}+j^{sa}-j_i)}^{()}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - k_1 - k_2 - l_{sa} - l_{ik} - j_{sa}^s)!}{(n_i - n - k_1 - k_2 - l_{sa} - l_{ik} - j_{sa}^s)! \cdot (n_i + j_{sa}^{ik} - j_{ik} - k_1 - k_2 - j_{sa}^s)!} \cdot \frac{(j_s - k - 1)!}{(j_s - k_1 - k_2 - 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > D - n - 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa}^{ik} \leq j^{sa} \wedge j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa}^{ik} \leq j^{sa} \wedge j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$(j_s < l_i \leq D + l_s + s - n - 1)) \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i}^{DSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()} \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-k} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j^{sa}+l_i-}^{n} \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{ik}-l_{k_1}}^{n} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{()} \sum_{(n_{sa}+j^{sa}-j_i-}^{n} \frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - l_{k_1} - l_{k_2} - j_{sa}^s)!}{(n_i - n - l_{k_1} - l_{k_2} - j_s - j_{sa}^s)! \cdot (n_{ik} + j_{ik} - l_{k_1} - j_{sa}^s)!} \cdot \frac{(n_i - j_s + 1)!}{(n_i - j_s - l_{k_1} - l_{k_2} + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\begin{aligned} & ((D \geq n < n \wedge l_s > D - n - 1 \wedge \\ & 2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} + j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_s = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee \\ & (D \geq n < n \wedge l_s \leq D - n + 1 \wedge \\ & 1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} + j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_s = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge \\ & (l_i < l_i \leq D + l_s + s - n - 1)) \wedge \end{aligned}$$

$$((D \geq n < n \wedge I = l > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, l_{k_2}, j_{sa}, \dots, l_{k_3}, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + l \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\}$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{sa}-k-j_{sa}+2)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s}^{()} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{()} \sum_{j_i=j^{sa}+s-j_s}^{()}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-k_1}^{()}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{(n_s=n_{sa}+j^{sa}-j_s)}^{()}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - k_2 - j_{sa}^s)!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (n_i + j_s + j_{sa}^{ik} - j_{ik} - k_2 - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa} \leq j_i + j_{sa} - s \wedge j^{sa} - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D - n < n \wedge l_s \leq D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$(D + s - n - l_i \leq D + l_s + s - n - 1)) \wedge$$

$$((D \geq n < n \wedge l = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz_{j_s, j_{ik}, j^{sa}, j_i}^{DSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s}^{()} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{()} \sum_{j_i=j^{sa}+s-j_i}^{()}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}}^{()} \sum_{(j_{ik}-l_{k_1})}^{()}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{sa})}^{()} \sum_{(n_s=n_{sa}+j^{sa}-j_i)}^{()}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - l_{k_2} - l_{k_3} - j_{sa}^s)!}{(n_i - n - l_{k_1} - l_{k_2} - l_{k_3})! \cdot (n_i + j_s + j_{sa}^{ik} - j_{ik} - l_{k_2} - l_{k_3} - j_{sa}^s)!}$$

$$\frac{(l_{k_2} - l_{k_3} - 1)!}{(j_s - l_{k_1} - l_{k_2} - l_{k_3} + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > D - l_i - 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa}^{ik} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa}^{ik} = j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$(j_s + s - 1 < l_i \leq D + l_s + s - n - 1)) \wedge$$

$$((D \geq n < n \wedge I = l_{k_1} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, l_{k_2}, j_{sa}, \dots, l_{k_3}, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + l_{k_1}$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz_{j_s, j_{ik}, j^{sa}, j_i}^{DSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s}^{()} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j^{sa}+l_i-1}^{()}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{ik}-k_1}^{()}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{(n_{sa}+j^{sa}-j_i)}^{()}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - k_1 - k_2 - j_{sa}^s)!}{(n_i - n - k_1 - k_2 - j_{sa}^s)! \cdot (n_{sa} + j_{sa}^{ik} - j_{sa}^s)!} \cdot \frac{(j_s - k - 1)!}{(j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > D - n - 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} + j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} + j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$(l_s \leq l_i \leq D + l_s + s - n - 1)) \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz_{j_s, j_{ik}, j^{sa}, j_i}^{DSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s}^{()} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j^{sa}+s-j_{sa}^{ik}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{ik}-k_1}^{(n_{ik}-j_{ik}-k_1)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{(n_{sa}=n_{sa}+j^{sa}-j_i)}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - k_1 - k_2 - j_{sa}^s)!}{(n_i - n - k_1 - k_2 - j_{sa}^s)! \cdot (n_{sa} + j_{sa}^{ik} - j_{sa}^s)!} \cdot \frac{(j_{sa}^{ik} - k - 1)!}{(j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\begin{aligned} & ((D \geq n < n \wedge l_s > D - n - 1 \wedge \\ & 2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} + j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee \\ & (D \geq n < n \wedge l_s \leq D - n - 1 \wedge \\ & 1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} + j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge \\ & (D - l_s - 1 < l_i \leq D + l_s + s - n - 1)) \wedge \end{aligned}$$

$$\begin{aligned} & ((D \geq n < n \wedge I = k > 0 \wedge \\ & s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge \\ & s \geq 7 \wedge s = s + k \wedge \end{aligned}$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\}$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s}^{()} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{()} \sum_{j_i=j^{sa}+s-j_s}^{()}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-l_{k1}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa})}^{()} \sum_{(n_s=n_{sa}+j^{sa}-j_s)}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - l_{k2} - j_{sa}^s)!}{(n_i - n - l_{k1} - l_{k2} - l_{k3})! \cdot (n_i + j_s + j_{sa}^{ik} - j_{ik} - l_{k2} - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - l_{k1} + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa} \leq j_i + j_{sa} - s \wedge j^{sa} - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D - n < n \wedge l_s \leq D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$(D + s - n - l_i \leq D + l_s + s - n - 1)) \wedge$$

$$((D \geq n < n \wedge l = l > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, l_{k1}, j_{sa}^{ik}, l_{k2}, j_{sa}, \dots, l_{k3}, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + l_k \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)} \sum_{j_{ik}=j_s+l_{ik}-l_s}^{()} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j_{sa}+l_i-l_{ik}}^{()} \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-l_{k_1}}^{()} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-l_{k_2})}^{()} \sum_{n_s=n_{sa}+j_{sa}-j_{sa}^i}^{()} \frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - l_{k_2} - l_{k_1} - j_{sa}^i)!}{(n_i - n - l_{k_1} - l_{k_2} - l_{k_3})! \cdot (n_i + j_s + j_{sa}^{ik} - j_{ik} - l_{k_2} - l_{k_1} - j_{sa}^i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - l_{k_1} - l_{k_2} + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > D - l_i - 1 \wedge 2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_i + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee ((D \geq n < n \wedge l_s \leq D - n + 1 \wedge 1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_i + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge (l_i + s - l_{ik} < l_i \leq D + l_s + s - n - 1)) \wedge$$

$$((D \geq n < n \wedge I = l_{k_1} > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, l_{k_2}, j_{sa}, \dots, l_{k_3}, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + l_{k_1} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

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$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

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$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\}$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z^{DSD} S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})} \sum_{j_i=j^{sa}+l_i-l_{ik}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-l_{k_1}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{(n_s=n_{sa}+j^{sa}-j_i)}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - l_{k_2} - l_{k_1} - j_{sa}^s)!}{(n_i - n - l_{k_1} - l_{k_2} - l_{k_3})! \cdot (n_i + j_s + j_{sa}^{ik} - j_{ik} - l_{k_2} - l_{k_1} - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - l_{k_1} + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > D - l_i - 1) \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa} = j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$(D + s - 1 < l_i \leq D + l_s + s - n - 1)) \wedge$$

$$((D \geq n < n \wedge I = l_k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, l_{k_2}, j_{sa}, \dots, l_{k_3}, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + l_k \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

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$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

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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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$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z^{DSD} S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s}^{()} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j^{sa}+s-j_i}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{i_k}=n_{i_s}-j_{ik}-l_{k_1}}$$

$$\sum_{(n_{sa}=n_{i_k}+j_{ik}-j^{sa}-l_{k_2})}^{()} \sum_{(n_s=n_{sa}+j^{sa}-j_i)}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - l_{k_2} - l_{k_1} - j_{sa}^s)!}{(n_i - n - l_{k_1} - l_{k_2} - l_{k_3})! \cdot (n_i + j_s + j_{sa}^{ik} - j_{ik} - l_{k_2} - l_{k_1} - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)!}{(j_s - l_i + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > D - l_i - 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa}^{ik} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa}^{ik} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$(j_s + s - 1 < l_i \leq D + l_s + s - n - 1)) \wedge$$

$$((D \geq n < n \wedge I = l_k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, l_{k_2}, j_{sa}, \dots, l_{k_3}, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + l_k \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

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$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

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$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\}$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

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$$fz_{j_s, j_{ik}, j^{sa}, j_i}^{DSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{()} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{()} \sum_{j_i=j^{sa}+s-j_s}^{()}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-l_{k_1}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-1)}^{()} \sum_{(n_s=n_{sa}+j^{sa}-j_i)}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - l_{k_2} - l_{k_3} - j_{sa}^s)!}{(n_i - n - l_{k_1} - l_{k_2} - l_{k_3})! \cdot (n_i + j_s + j_{sa}^{ik} - j_{ik} - l_{k_2} - l_{k_3} - j_{sa}^s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - l_{k_1} + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > D - l_i - 1) \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa}^{ik} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1) \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa}^{ik} = j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$(D + s - 1 < l_i \leq D + l_s + s - n - 1)) \wedge$$

$$((D \geq n < n \wedge I = l_k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, l_{k_2}, j_{sa}, \dots, l_{k_3}, j_{sa}^i\} \wedge$$

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$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

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$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

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$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

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$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

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$$fz_{j_s, j_{ik}, j^{sa}, j_i}^{DSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j^{sa}+l_i-l_s}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_s)}^{()} \sum_{(n_s=n_{sa}+j^{sa}-j_i)}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - k_2 - l_s - j_{sa}^s)!}{(n_i - n - k_1 - k_2 - l_s)! \cdot (n_i + j_s + j_{sa}^{ik} - j_{ik} - k_2 - l_s - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)!}{(j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > D - l_i - 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa}^{ik} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

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$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa}^{ik} = j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$(l_i + j_{sa} - s < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i}^{DSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \binom{D+l_s+s-n-l_i}{j_s=j_{ik}+l_s-l_{ik}} \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \binom{D+l_s+s-n-l_i}{j^{sa}=j_i+l_{sa}-l_i} \sum_{j_i=l_{sa}+n+s-D-j_{ik}} \binom{l_{ik}+s-k-j_{sa}^{ik}+1}{n_i=n+k} \sum_{n_{is}=n+k-j_s+1}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-k_1} \binom{n}{n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{sa}} \sum_{n_s=n_{sa}+j^{sa}-j_i} \binom{n_i-j_s+1}{n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{sa}} \sum_{n_s=n_{sa}+j^{sa}-j_i} \binom{n_i-j_s+1}{n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{sa}}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - k_2 - k_3 - j_{sa}^s)!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (n_{sa} + j_{sa}^{ik} - j_{sa}^s)!} \cdot \frac{(n_i - j_s - k_1 - k_2 - k_3 - 1)!}{(n_i - j_s - k_1 - k_2 - k_3)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > D - n - 1 \wedge 2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge j_{ik} + j_{sa}^{ik} - j_{sa}^{ik} \leq j^{sa} + j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee ((D \geq n < n \wedge l_s \leq D - n - 1 \wedge 1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge j_{ik} + j_{sa}^{ik} - j_{sa}^{ik} = j^{sa} + j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge (j_i - l_i < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge s \geq 7 \wedge s = s + k \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz_{j_s, j_{ik}, j^{sa}, j_i}^{DSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()} \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{()} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{()} \sum_{j_i=l_{sa}+n+s-D-j_{ik}}^{l_s+s-k} \sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{i_k}=n_{i_s}-j_{ik}-l_{k_1}}^{()} \sum_{(n_{sa}=n_{i_k}+j_{ik}-j^{sa}-l_{k_2})}^{()} \sum_{(n_s=n_{sa}+j^{sa}-j_i)}^{()} \frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - l_{k_2} - l_{k_1} - j_{sa}^s)!}{(n_i - n - l_{k_1} - l_{k_2} - l_{k_3})! \cdot (n_i - j_s + j_{sa}^{ik} - j_{ik} - l_{k_2} - l_{k_1} - j_{sa}^s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - l_{k_1} + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > D - l_i - 1) \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa} \leq j^{sa} \wedge j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1) \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa} \leq j^{sa} \wedge j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$(l_i + j_{sa} - s < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$((D \geq n < n \wedge l = l > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, l_{k_2}, j_{sa}, \dots, l_{k_3}, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + l_k \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz_{j_s, j_{ik}, j^{sa}, j_i}^{DSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()} \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{()} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{()} \sum_{j_i=l_{sa}+n+s-D-j_{ik}}^{l_s+s-k} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-k_1}^{()} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{()} \frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - k_2 - l_{sa} - j_{sa}^s)!}{(n_i - n - k_1 - k_2 - l_{sa})! \cdot (n_i + j_s + j_{sa}^{ik} - j_{ik} - k_2 - l_{sa} - j_{sa}^s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\begin{aligned} & ((D \geq n < n \wedge l_s > D - l_i - 1 \wedge \\ & 2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa}^{ik} - j_{sa}^{ik} \leq j^{sa} \wedge j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee \\ & ((D \geq n < n \wedge l_s \leq D - n + 1 \wedge \\ & 1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa}^{ik} - j_{sa}^{ik} = j^{sa} \wedge j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge \\ & (j_i + j_{sa} - s < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge \end{aligned}$$

$$\begin{aligned} & ((D \geq n < n \wedge I = k > 0 \wedge \\ & s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge \\ & s \geq 7 \wedge s = s + k \wedge \end{aligned}$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz_{j_s, j_{ik}, j^{sa}, j_i}^{DSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()} \sum_{j_{ik}=j^{sa}+j_{sa}^{lk}-j_{sa}}^{()} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{()} \sum_{j_i=l_{sa}+n+s-D-j_{ik}}^{l_s+s-k} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-k_1}^{()} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{n_{sa}=n_{sa}+j^{sa}-j_i}^{()} \frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - k_2 - k_1 - j_{sa}^s)!}{(n_i - n - k_1 - k_2 - j_{sa}^s)! \cdot (n_i + j_{sa}^{lk} - j_{sa} - j_{sa}^s)!} \cdot \frac{(j_s - k - 1)!}{(j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\begin{aligned} & ((D \geq n < n \wedge l_s > D - n - 1 \wedge \\ & 2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{lk} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} + j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{lk} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee \\ & (D \geq n < n \wedge l_s \leq D - n - 1 \wedge \\ & 1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{lk} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} + j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{lk} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge \\ & (j_i - l_i < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge \end{aligned}$$

$$\begin{aligned} & ((D \geq n < n \wedge I = k > 0 \wedge \\ & s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge \\ & s \geq 7 \wedge s = s + k \wedge \end{aligned}$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

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$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz_{j_s, j_{ik}, j^{sa}, j_i}^{DSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()} \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(l_{ik}+j_{sa}-k-j_{sa}^{ik}+1)} \sum_{(j^{sa}=l_{sa}+n-D)} \sum_{j_i=j^{sa}+l_i-l_{ik}} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{ik}-k_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{n_{sa}=n_{sa}+j^{sa}-j_i} \frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - k_2 - k_1 - j_{sa}^s)!}{(n_i - n - k_1 - k_2 - \dots)! \cdot (n_{is} + j_{sa}^{ik} - j_{sa}^s)!} \cdot \frac{(j_{sa}^{ik} - k - 1)!}{(j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > D - n - 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} + j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n - 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} + j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$(j_i - l_i < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz_{j_s, j_{ik}, j^{sa}, j_i}^{DSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(l_s+j_{sa}-k)} \sum_{(j^{sa}=l_{sa}+n-D)} \sum_{j_i=j^{sa}+l_i-l_{ik}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{i_k}=n_{i_s}-j_{ik}-l_{k_1}}$$

$$\sum_{(n_{sa}=n_{i_k}+j_{ik}-j^{sa}-l_{k_2})}^{()} \sum_{(n_s=n_{sa}+j^{sa}-j_i)}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - l_{k_2} - l_{k_1} - j_{sa}^s)!}{(n_i - n - l_{k_1} - l_{k_2} - l_{k_3})! \cdot (n_i + j_s + j_{sa}^{ik} - j_{ik} - l_{k_2} - l_{k_1} - j_{sa}^s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - l_{k_1} + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > D - l_i - 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa}^{ik} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa}^{ik} = j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$(l_s + j_{sa}^{ik} - l_{ik} < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$((D \geq n < n \wedge l = l > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, l_{k_2}, j_{sa}, \dots, l_{k_3}, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + l_k \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz_{j_s, j_{ik}, j^{sa}, j_i}^{DSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()} \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{(l_s+j_{sa}-k)} \sum_{(j^{sa}=l_{sa}+n-D)} \sum_{j_i=j^{sa}+l_i-1} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-k_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-1)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i} \frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - k_2 - k_3 - j_{sa}^s)!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (n_i + j_s + j_{sa}^{ik} - j_{ik} - k_2 - k_3 - j_{sa}^s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\begin{aligned} & ((D \geq n < n \wedge l_s > D - l_i - 1 \wedge \\ & 2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa}^{ik} - j_{sa}^{ik} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee \\ & ((D \geq n < n \wedge l_s \leq D - n + 1 \wedge \\ & 1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa}^{ik} - j_{sa}^{ik} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge \\ & (j_s + j_{sa}^{ik} - j_{sa}^{ik} < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge \end{aligned}$$

$$\begin{aligned} & ((D \geq n < n \wedge I = k > 0 \wedge \\ & s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge \\ & s \geq 7 \wedge s = s + k \wedge \end{aligned}$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz_{j_s, j_{ik}, j_{sa}, j_i}^{DSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()} \sum_{j_{ik}=j_{sa}^{ik}+j_{sa}^{lk}-j_{sa}}^{(l_s+j_{sa}-k)} \sum_{(j_{sa}=l_{sa}+n-D)} \sum_{j_i=j_{sa}^{ik}+l_i-1} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-k_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{lk}-k_2)}^{()} \sum_{n_{sa}=n_{sa}+j_{sa}^{ik}-j_i} \frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - k_2 - k_1 - j_{sa}^s)!}{(n_i - n - k_1 - k_2 - j_{sa}^s)! \cdot (n_i + j_{sa}^{lk} - j_{sa} - j_{sa}^s)!} \cdot \frac{(n_i - j_s + 1)!}{(n_i - j_s - k_1 + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > D - n - 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{lk} - 1 \leq j_{ik} \leq j_{sa}^{ik} + j_{sa}^{lk} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{lk} - j_{sa}^{ik} \leq j_{sa}^{lk} \leq j_i + j_{sa} - s \wedge j_{sa}^{ik} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{lk} - j_{sa}^{lk} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n - 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{lk} - 1 \leq j_{ik} \leq j_{sa}^{ik} + j_{sa}^{lk} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{lk} - j_{sa}^{ik} \leq j_{sa}^{lk} \leq j_i + j_{sa} - s \wedge j_{sa}^{ik} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{lk} - j_{sa}^{lk} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$(l_i + j_{sa} - s < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}^s, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz_{j_s, j_{ik}, j^{sa}, j_i}^{DSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \binom{D+l_s+s-n-l_i}{j_s=j_{ik}+l_s-l_{ik}} \sum_{j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa}}^{l_{ik}-k+1} \binom{D+l_s+s-n-l_i}{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \sum_{j_i=j^{sa}+l_i-l_{ik}}^{(n_i-j_s+1)} \binom{n_i-j_s+1}{n_i=n+l_k} \binom{n_i-j_s+1}{n_{i_s}=n+l_k-j_s+1} \binom{n_i-j_s+1}{n_{i_k}=n_{i_s}-j_{ik}-l_{k_1}} \binom{n_i-j_s+1}{n_{sa}=n_{i_k}+j_{ik}-j^{sa}-l_{k_2}} \binom{n_i-j_s+1}{n_s=n_{sa}+j^{sa}-j_i} \frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - l_{k_2} - l_{k_3} - j_{sa}^s)!}{(n_i - n - l_{k_1} - l_{k_2} - l_{k_3})! \cdot (n_i + j_s + j_{sa}^{ik} - j_{ik} - l_{k_2} - l_{k_3} - j_{sa}^s)!} \cdot \frac{(l_{ik} - k - 1)!}{(l_{ik} - j_s - l_{k_1} + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\begin{aligned} & ((D \geq n < n \wedge l_s > D - l_i - 1 \wedge \\ & 2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa}^{ik} - j_{sa}^{ik} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee \\ & ((D \geq n < n \wedge l_s \leq D - n + 1 \wedge \\ & 1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa}^{ik} - j_{sa}^{ik} = j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge \\ & (j_s + j_{sa}^{ik} - l_{k_1} < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge \end{aligned}$$

$$\begin{aligned} & ((D \geq n < n \wedge I = l_k > 0 \wedge \\ & s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, l_{k_2}, j_{sa}, \dots, l_{k_3}, j_{sa}^i\} \wedge \\ & s \geq 7 \wedge s = s + l_k \wedge \end{aligned}$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz_{j_s, j_{ik}, j^{sa}, j_i}^{DSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()} \sum_{j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa}}^{l_s+j_{sa}^{ik}-k} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j^{sa}+l_i-l_{ik}}^{(n_i-j_s+1)} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-k_1}^{(n_i-j_s+1)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{(n_i-j_s+1)} \sum_{n_{is}=n_{sa}+j_{sa}-j_i}^{(n_i-j_s+1)} \frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - k_2 - k_1 - j_{sa}^s)!}{(n_i - n - k_1 - k_2 - j_{sa}^s)! \cdot (n_i + j_{sa}^{ik} - j_{ik} - k_2 - k_1 - j_{sa}^s)!} \cdot \frac{(n_i - j_s - k_1 - k_2 - j_{sa}^s - k - 1)!}{(n_i - j_s - k_1 - k_2 - j_{sa}^s + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\begin{aligned} & ((D \geq n < n \wedge l_s > D - n - 1 \wedge \\ & 2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} + j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee \\ & ((D \geq n < n \wedge l_s \leq D - n - 1 \wedge \\ & 1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} + j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge \\ & (j_i - l_i < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge \end{aligned}$$

$$\begin{aligned} & ((D \geq n < n \wedge I = k > 0 \wedge \\ & s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge \\ & s \geq 7 \wedge s = s + k \wedge \end{aligned}$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz_{j_s, j_{ik}, j^{sa}, j_i}^{DSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()} \sum_{j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa}}^{l_s+j_{sa}^{ik}-k} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{()} \sum_{j_i=j^{sa}+l_i}^{n} \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+l_{ik}-j_{ik}-k_1}^{n} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{n_{sa}+j^{sa}-j_i}^{n} \frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - l_{sa} - l_{ik} - k_1 - k_2 + j_{sa}^s)!}{(n_i - n - k_1 - k_2 - l_{sa} - l_{ik} - l_i + j_{sa}^s)! \cdot (n - j_s - l_i - k_1 - k_2 - j_{sa}^s)!} \cdot \frac{(j_s - k - 1)!}{(j_s - k_1 - k_2 - 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\begin{aligned} & ((D \geq n < n \wedge l_s > D - n - 1 \wedge \\ & 2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} + j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee \\ & (D \geq n < n \wedge l_s \leq D - n - 1 \wedge \\ & 1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} + j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge \\ & (j_i - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge \end{aligned}$$

$$\begin{aligned} & ((D \geq n < n \wedge I = k > 0 \wedge \\ & s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge \\ & s \geq 7 \wedge s = s + k \wedge \end{aligned}$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\}$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz_{j_s, j_{ik}, j^{sa}, j_i}^{DSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()} \sum_{j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa}}^{l_s+j_{sa}^{ik}-k} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j^{sa}+l_i-} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{ik}-k_1}^{n_{ik}=n_{is}+j_{ik}-k_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2}^{n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2} \frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - k_1 - k_2 - k_3 - k_4 - j_{sa}^s)!}{(n_i - n - k_1 - k_2 - k_3 - k_4 - j_{sa}^s)! \cdot (n_{sa} + j_{sa}^{ik} - j_{sa}^s)!} \cdot \frac{(j_s - k - 1)!}{(j_s - k - 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\begin{aligned} & ((D \geq n < n \wedge l_s > D - n - 1 \wedge \\ & 2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} + j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee \\ & ((D \geq n < n \wedge l_s \leq D - n + 1 \wedge \\ & 1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} + j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge \\ & (n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge \end{aligned}$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$f_z^{SDSD} S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j_{ik}=j_s+l_{ik}-l_s}^{()} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j^{sa}+l_i-1}^{()} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{ik}-j_{ik}-k_1}^{()} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{n_{sa}=n_{sa}+j^{sa}-j_i}^{()} \frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - k_1 - k_2 - j_{sa}^s)!}{(n_i - n - k_1 - k_2 - j_{sa}^s)! \cdot (n_i + j_{sa} - j_{sa}^s)!} \cdot \frac{(j_s - k - 1)!}{(j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\begin{aligned} & ((D \geq n < n \wedge l_s > D - n - 1 \wedge \\ & 2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} + j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee \\ & ((D \geq n < n \wedge l_s \leq D - n - 1 \wedge \\ & 1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} + j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge \\ & (j_i - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge \end{aligned}$$

$$\begin{aligned} & ((D \geq n < n \wedge I = k > 0 \wedge \\ & s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge \\ & s \geq 7 \wedge s = s + k \wedge \end{aligned}$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz_{j_s, j_{ik}, j^{sa}, j_i}^{DSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_s-k-1)} \sum_{j_{ik}=j_s+l_{ik}-l_s}^{()} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{()} \sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{i_s}-j_{ik}-l_{k_1}}^{()} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{()} \frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - l_{k_2} - l_{k_1} - j_{sa}^s)!}{(n_i - n - l_{k_1} - l_{k_2} - l_{k_3})! \cdot (n_i + j_s + j_{sa}^{ik} - j_{ik} - l_{k_2} - l_{k_1} - j_{sa}^s)!} \cdot \frac{(l_s - k - 1)!}{(j_s - l_{k_1} - l_{k_2} + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\begin{aligned} & ((D \geq n < n \wedge l_s > D - l_i - 1 \wedge \\ & 2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa}^{ik} - j_{sa}^{ik} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee \\ & ((D \geq n < n \wedge l_s \leq D - n + 1 \wedge \\ & 1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa}^{ik} - j_{sa}^{ik} = j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge \\ & (j_{sa}^{ik} + j_{sa} - s < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge \end{aligned}$$

$$\begin{aligned} & ((D \geq n < n \wedge I = l_k > 0 \wedge \\ & s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, l_{k_2}, j_{sa}, \dots, l_{k_3}, j_{sa}^i\} \wedge \end{aligned}$$

$$s \geq 7 \wedge s = s + l_k \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz_{j_s, j_{ik}, j^{sa}, j_i}^{DSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_s-k-1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{()} \sum_{j_i=j^{sa}+l_i-l_{ik}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-l_{k_1}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-1)}^{()} \sum_{(n_s=n_{sa}+j^{sa}-j_i)}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - l_{k_2} - l_{k_3} - j_{sa}^s)!}{(n_i - n - l_{k_1} - l_{k_2} - l_{k_3})! \cdot (n_i + j_s + j_{sa}^{ik} - j_{ik} - l_{k_2} - l_{k_3} - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > D - l_i - 1) \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa}^{ik} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa}^{ik} = j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$(l_i + j_{sa} - s < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$((D \geq n < n \wedge l = l > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, l_{k_2}, j_{sa}, \dots, l_{k_3}, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + l \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz_{j_s, j_{ik}, j^{sa}, j_i}^{DSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_s-k-1)}$$

$$\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}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{i_s}-j_{ik}-l_{k_1}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{(\)} \sum_{(n_s=n_{sa}+j^{sa}-j_i)}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - l_{k_2} - l_{k_1} - j_{sa}^s)!}{(n_i - n - l_{k_1} - l_{k_2} - l_{k_3})! \cdot (n_i + j_s + j_{sa}^{ik} - j_{ik} - l_{k_2} - l_{k_1} - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)!}{(j_s - l_s + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > D - l_i - 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$(j_{ik} - l_{ik} < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1)) \wedge$$

$$((D \geq n < n \wedge I = l_k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, l_{k_2}, j_{sa}, \dots, l_{k_3}, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + l_k \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3) \Rightarrow$$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i}^{DSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()} \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{()} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{()} \sum_{j_i=l_{ik}+s+n-D-j^{sa}}^{l_s+s-k} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-k_1}^{()} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{n_{sa}=n_{sa}+j^{sa}-j_i}^{()} \frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - k_2 - k_1 - j_{sa}^s)!}{(n_i - n - k_1 - k_2 - \dots)! \cdot (n_i + j_s + j_{sa}^{ik} - j_{ik} - k_2 - k_1 - j_{sa}^s)!} \cdot \frac{(n_i - j_s + 1)! \cdot (j_s - 1)!}{(n_i - j_s - k_1 - k_2 - \dots + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\begin{aligned} & ((D \geq n < n \wedge l_s > D - n - 1 \wedge \\ & 2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} + j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee \\ & (D \geq n < n \wedge l_s \leq D - n - 1 \wedge \\ & 1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} + j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge \\ & (j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1)) \wedge \end{aligned}$$

$$\begin{aligned} & ((D \geq n < n \wedge I = k > 0 \wedge \\ & s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge \\ & s \geq 7 \wedge s = s + k \wedge \end{aligned}$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\}$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i}^{DSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()} \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{(l_s+j_{sa}-k)} \sum_{(j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik})} \sum_{j_i=j^{sa}+l_i-1}^{()} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{ik}-k_1}^{()} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{(n_{sa}+j^{sa}-j_i)}^{()} \frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - k_2 - k_1 - j_{sa}^s)!}{(n_i - n - k_1 - k_2 - j_{sa}^s)! \cdot (n_{is} + j_{sa}^{ik} - j_{sa}^s)!} \cdot \frac{(n_{ik} - k_1 - 1)!}{(n_{is} - j_s - k_1 + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > D - n - 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} + j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n - 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} + j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$(j_{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1)) \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$fz_{j_s, j_{ik}, j^{sa}, j_i}^{DSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()} \sum_{j_{ik}=l_{ik}+n-D}^{l_s+j_{sa}^{ik}-k} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{()} \sum_{j_i=j^{sa}+l_i-}^{()} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-k_1}^{(n_{is}-j_s+1)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{n_{is}=n_{sa}+j^{sa}-j_i}^{(n_{is}-j_s+1)} \frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - k_2 - k_1 - j_{sa}^s)!}{(n_i - n - k_1 - k_2 - \dots)! \cdot (n_{is} + j_{sa}^{ik} - j_{sa}^s - j_{sa}^s)!} \cdot \frac{(n_{ik} - k - 1)!}{(n_{is} - j_s - k_1 - k_2 + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > D - n - 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} + j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} + j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$(j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1)) \wedge$$

$$((D \geq n < n \wedge I = k > 0 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 7 \wedge s = s + k \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_3) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2) \vee$$

$$(D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_3)) \Rightarrow$$

$$\begin{aligned}
 f_z S_{j_s, j_{ik}, j^{sa}, j_i}^{DSD} &= \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_s-k+1)} \\
 &\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{()} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{()} \sum_{j_i=j^{sa}+l_i-1}^{()} \\
 &\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-k_1}^{()} \\
 &\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{n_{sa}=n_{sa}+j^{sa}-j_i}^{()} \\
 &\frac{(n_i + j_s + j_{sa}^{ik} - j_{ik} - k_2 - k_1 - j^{sa})!}{(n_i - n - k_1 - k_2 - j^{sa})! \cdot (n_i + j_{sa}^{ik} - j_{ik} - k_2 - k_1 - j^{sa})!} \cdot \\
 &\frac{(n_i - j_s - k_1 - k_2 - j^{sa} - 1)! \cdot (j_s - k - 1)!}{(n_i - j_s - k_1 - k_2 - j^{sa} + 1)! \cdot (j_s - 2)!} \cdot \\
 &\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

GÜLDÜZYA

DİZİN

B

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrisinin son durumunun bulunabileceği olaylara göre

- simetrik olasılık, 2.3.1.1.1.1.1/3
- toplam düzgün simetrik olasılık, 2.3.1.2.1.1.1/3
- toplam düzgün olmayan simetrik olasılık, 2.3.1.3.1.1.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrisinin son durumunun bulunabileceği olaylara göre

- simetrik olasılık, 2.3.1.1.1.1.2/3
- toplam düzgün simetrik olasılık, 2.3.1.2.1.1.2/3
- toplam düzgün olmayan simetrik olasılık, 2.3.1.3.1.1.2/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrisinin son durumunun bulunabileceği olaylara göre

- simetrik olasılık, 2.3.1.1.1.3.1/3
- toplam düzgün simetrik olasılık, 2.3.1.2.1.1.3/3
- toplam düzgün olmayan simetrik olasılık, 2.3.1.3.1.1.3/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bir bağımlı-bir bağımsız durumlu simetrisinin son durumunun bulunabileceği olaylara göre

- simetrik olasılık, 2.3.1.1.1.1.1/2
- toplam düzgün simetrik olasılık, 2.3.1.2.1.1.1/228
- toplam düzgün olmayan simetrik olasılık, 2.3.1.3.1.1.1/290

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bir bağımlı-bir bağımsız durumlu bağımsız simetrisinin son durumunun bulunabileceği olaylara göre

- simetrik olasılık, 2.3.1.1.1.1.2/203
- toplam düzgün simetrik olasılık, 2.3.1.2.1.1.2/228

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.1.1.2/290

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bir bağımlı-bir bağımsız durumlu bağımlı simetrisinin son durumunun bulunabileceği olaylara göre

- simetrik olasılık, 2.3.1.1.1.1.3/103
- toplam düzgün simetrik olasılık, 2.3.1.2.1.1.3/228
- toplam düzgün olmayan simetrik olasılık, 2.3.1.3.1.1.3/290

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu simetrisinin son durumunun bulunabileceği olaylara göre

- simetrik olasılık, 2.3.1.1.1.4.1/3
- toplam düzgün simetrik olasılık, 2.3.1.2.1.1.1/3

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.1.4.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımsız simetrisinin son durumunun bulunabileceği olaylara göre

- simetrik olasılık, 2.3.1.1.1.4.2/3
- toplam düzgün simetrik olasılık, 2.3.1.2.1.4.2/3
- toplam düzgün olmayan simetrik olasılık, 2.3.1.3.1.4.2/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımlı simetrisinin son durumunun bulunabileceği olaylara göre

- simetrik olasılık, 2.3.1.1.1.4.3/3
- toplam düzgün simetrik olasılık, 2.3.1.2.1.4.3/3
- toplam düzgün olmayan simetrik olasılık, 2.3.1.3.1.4.3/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bir bağımlı-bağımsız durumlu simetrisinin son durumunun bulunabileceği olaylara göre

- simetrik olasılık, 2.3.1.1.1.1.1/207
- toplam düzgün simetrik olasılık, 2.3.1.2.1.1.1/236

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.1.1.1.1/296-297

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bir bağımlı-bağımsız durumlu bağımsız simetrisinin son durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.1.1.2.1/207

toplam düzgün simetrik olasılık, 2.3.1.2.1.1.2.1/236

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.1.1.2.1/296-297

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bir bağımlı-bağımsız durumlu bağımlı simetrisinin son durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.1.1.3.1/207

toplam düzgün simetrik olasılık, 2.3.1.2.1.1.3.1/236

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.1.1.3.1/296-297

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu simetrisinin son durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.1.6.1.1/3

toplam düzgün simetrik olasılık, 2.3.1.2.1.6.1.1/3

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.1.6.1.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımsız simetrisinin son durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.1.6.2.1/3

toplam düzgün simetrik olasılık, 2.3.1.2.1.6.2.1/3

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.1.6.2.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımlı simetrisinin son durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.1.6.3.1/3

toplam düzgün simetrik olasılık, 2.3.1.2.1.6.3.1/3

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.1.6.3.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrisinin durumuna bağlı

simetrik olasılık, 2.3.1.1.1.1.1.1/105

toplam düzgün simetrik olasılık, 2.3.1.2.1.1.1.1/85

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.1.1.1.1/150-151

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrisinin durumuna bağlı

simetrik olasılık, 2.3.1.1.1.1.1.1/105

toplam düzgün simetrik olasılık, 2.3.1.2.1.1.1.1/85

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.1.1.1.1/150-151

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrisinin durumuna bağlı

simetrik olasılık, 2.3.1.1.1.1.1.1/105

toplam düzgün simetrik olasılık, 2.3.1.2.1.1.1.1/85

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.1.1.1.1/150-151

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrisinin ilk ve son durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.2.1.1.1/4

toplam düzgün simetrik olasılık, 2.3.1.2.2.1.1.1/3

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.2.1.1.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrisinin ilk ve son durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.2.1.2.1/4

toplam düzgün simetrik olasılık, 2.3.1.2.2.1.2.1/3

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.2.1.2.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrisinin ilk ve son durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.2.1.3.1/4

toplam düzgün simetrik olasılık,
2.3.1.2.2.1.3.1/3

toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.2.1.3.1/4

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımsız-bağımlı durumlu
simetrisinin ilk ve son durumunun
bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.2.2.1.1/5

toplam düzgün simetrik olasılık,
2.3.1.2.2.2.1.1/3

toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.2.2.1.1/6

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımsız-bağımlı durumlu
bağımsız simetrisinin ilk ve son durumunun
bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.2.2.2.1/5

toplam düzgün simetrik olasılık,
2.3.1.2.2.2.2.1/3

toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.2.2.2.1/6

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımsız-bağımlı durumlu
bağımlı simetrisinin ilk ve son durumunun
bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.2.2.3.1/3-4

toplam düzgün simetrik olasılık,
2.3.1.2.2.2.3.1/3-4

toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.2.2.3.1/5

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımsız-bağımsız durumlu
simetrisinin ilk ve son durumunun
bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.2.4.1.1/4

toplam düzgün simetrik olasılık,
2.3.1.2.2.4.1.1/3

toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.2.4.1.1/4

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı-bir bağımsız durumlu
bağımsız simetrisinin ilk ve son durumunun
bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.2.4.2.1/4

toplam düzgün simetrik olasılık,
2.3.1.2.2.4.2.1/3

toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.2.4.2.1/4

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı-bir bağımsız durumlu
bağımlı simetrisinin ilk ve son durumunun
bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.2.4.3.1/4

toplam düzgün simetrik olasılık,
2.3.1.2.2.4.3.1/3

toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.2.4.3.1/4

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımsız-bağımsız durumlu
simetrisinin ilk ve son durumunun
bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.2.6.1/4

toplam düzgün simetrik olasılık,
2.3.1.2.2.6.1.1/3

toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.2.6.1.1/4

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı-bağımsız durumlu
bağımsız simetrisinin ilk ve son durumunun
bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.2.6.2.1/4

toplam düzgün simetrik olasılık,
2.3.1.2.2.6.2.1/3

toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.2.6.2.1/4

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı-bağımsız durumlu
bağımlı simetrisinin ilk ve son durumunun
bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.2.6.3.1/4

toplam düzgün simetrik olasılık,
2.3.1.2.2.6.3.1/3

toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.2.6.3.1/4

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımsız-bağımsız durumlu
simetrisinin ilk ve son durumunun
bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.2.7.1.1/5

toplam düzgün simetrik olasılık,
2.3.1.2.2.7.1.1/3

toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.2.7.1.1/6

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımsız-bağımsız durumlu
bağımsız simetrisinin ilk ve son durumunun
bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.2.7.2.1/5

toplam düzgün simetrik olasılık,
2.3.1.2.2.7.2.1/3

toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.2.7.2.1/6

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımsız-bağımsız durumlu
bağımlı simetrisinin ilk ve son durumunun
bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.2.7.3.1/3-4

toplam düzgün simetrik olasılık,
2.3.1.2.2.7.3.1/3-4

toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.2.7.3.1/5

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı durumlu simetrisinin ilk
ve herhangi bir durumunun bulunabileceği
olaylara göre

simetrik olasılık, 2.3.1.1.3.1.1.1/4

toplam düzgün simetrik olasılık,
2.3.1.2.3.1.1.1/3

toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.3.1.1.1/5-6

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı durumlu bağımsız
simetrisinin ilk ve herhangi bir durumunun
bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.3.1.2.1/4

toplam düzgün simetrik olasılık,
2.3.1.2.3.1.2.1/3

toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.3.1.2.1/5-6

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı durumlu bağımlı
simetrisinin ilk ve herhangi bir durumunun
bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.3.1.3.1/4

toplam düzgün simetrik olasılık,
2.3.1.2.3.1.3.1/3

toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.3.1.3.1/5-6

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımsız-bağımlı durumlu
simetrisinin ilk ve herhangi bir durumunun
bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.3.2.1.1/5

toplam düzgün simetrik olasılık,
2.3.1.2.3.2.1.1/3

toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.3.2.1.1/8

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımsız-bağımlı durumlu
bağımsız simetrisinin ilk ve herhangi bir
durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.3.2.2.1/5

toplam düzgün simetrik olasılık,
2.3.1.2.3.2.2.1/3

toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.3.2.2.1/5-6

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımsız-bağımlı durumlu
bağımlı simetrisinin ilk ve herhangi bir
durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.3.2.3.1/4

toplam düzgün simetrik olasılık,
2.3.1.2.3.2.3.1/3-4

toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.3.2.3.1/6

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı durumlu simetrisinin
herhangi bir durumuna bağlı

simetrik olasılık, 2.3.1.1.4.1.1.1/4

toplam düzgün simetrik olasılık,
2.3.1.2.4.1.1.1/3

toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.4.1.1.1/5-6

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı durumlu bağımsız
simetrisinin herhangi iki durumuna bağlı

simetrik olasılık, 2.3.1.1.4.1.2.1/4

toplam düzgün simetrik olasılık,
2.3.1.2.4.1.2.1/3

toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.4.1.2.1/5-6

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı durumlu bağımlı
simetrisinin herhangi iki durumuna bağlı

simetrik olasılık, 2.3.1.1.4.1.3.1/4

toplam düzgün simetrik olasılık,
2.3.1.2.4.1.3.1/3

toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.4.1.3.1/5-6

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı durumlu simetrisinin her
durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.4.1.1.1/838

simetrik olasılık, 2.3.1.1.4.1.1.1/838

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı durumlu bağımsız

simetrisinin her durumunun bulunabileceği olaylara göre

simetrik olasılık,
2.3.1.1.4.1.2.1/838

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrisinin her durumunun bulunabileceği olaylara göre

simetrik olasılık,
2.3.1.1.4.1.3.1/838

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrisinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.5.1.1.1/4-5
toplam düzgün simetrik olasılık,
2.3.1.2.5.1.1.1/3
toplam düzgün olmayan simetrik olasılık, 2.3.1.3.5.1.1.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrisinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.5.1.2.1/4-5
toplam düzgün simetrik olasılık,
2.3.1.2.5.1.2.1/3
toplam düzgün olmayan simetrik olasılık, 2.3.1.3.5.1.2.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrisinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.5.1.3.1/4-5
toplam düzgün simetrik olasılık,
2.3.1.2.5.1.3.1/3
toplam düzgün olmayan simetrik olasılık, 2.3.1.3.5.1.3.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu simetrisinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.5.2.1.1/6
toplam düzgün simetrik olasılık,
2.3.1.2.5.2.1.1/3
toplam düzgün olmayan simetrik olasılık, 2.3.1.3.5.2.1.1/12

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımsız simetrisinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.5.2.2.1/6
toplam düzgün simetrik olasılık,
2.3.1.2.5.2.2.1/3

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.5.2.2.1/12

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımlı simetrisinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.5.2.3.1/4-5
toplam düzgün simetrik olasılık,
2.3.1.2.5.2.3.1/3
toplam düzgün olmayan simetrik olasılık, 2.3.1.3.5.2.3.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrisinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre herhangi iki duruma bağlı

simetrik olasılık, 2.3.1.1.8.1.1.1/7-8
toplam düzgün olmayan simetrik olasılık, 2.3.1.3.8.1.1.1/8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrisinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre herhangi iki duruma bağlı

simetrik olasılık, 2.3.1.1.8.1.2.1/7-8
toplam düzgün olmayan simetrik olasılık, 2.3.1.3.8.1.2.1/8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrisinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre herhangi iki duruma bağlı

simetrik olasılık, 2.3.1.1.8.1.3.1/7-8
toplam düzgün olmayan simetrik olasılık, 2.3.1.3.8.1.3.1/8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu simetrisinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre herhangi iki duruma bağlı

simetrik olasılık, 2.3.1.1.8.2.1.1/12
toplam düzgün olmayan simetrik olasılık, 2.3.1.3.8.2.1.1/13

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımsız simetrisinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre herhangi iki duruma bağlı

simetrik olasılık, 2.3.1.1.8.2.2.1/12
 toplam düzgün olmayan simetrik olasılık, 2.3.1.3.8.2.2.1/13

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımlı simetrisinin ilk herhangi iki durumunun bulunabileceği olaylara göre herhangi iki duruma bağlı

simetrik olasılık, 2.3.1.1.8.2.3.1/8
 toplam düzgün olmayan simetrik olasılık, 2.3.1.3.8.2.3.1/8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.6.1.1.1/4-5
 toplam düzgün simetrik olasılık, 2.3.1.2.6.1.1.1/3-4
 toplam düzgün olmayan simetrik olasılık, 2.3.1.3.6.1.1.1/6

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.6.1.1.1/4-5
 toplam düzgün simetrik olasılık, 2.3.1.2.6.1.2.1/3-4
 toplam düzgün olmayan simetrik olasılık, 2.3.1.3.6.1.2.1/6

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.6.1.1/4-5
 toplam düzgün simetrik olasılık, 2.3.1.2.6.1.3.1/3-4
 toplam düzgün olmayan simetrik olasılık, 2.3.1.3.6.1.3.1/6

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.6.2.1.1/6
 toplam düzgün simetrik olasılık, 2.3.1.2.6.2.1.1/3-4
 toplam düzgün olmayan simetrik olasılık, 2.3.1.3.6.2.1.1/9

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu

bağımsız simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.6.2.2.1/6
 toplam düzgün simetrik olasılık, 2.3.1.2.6.2.2.1/3-4
 toplam düzgün olmayan simetrik olasılık, 2.3.1.3.6.2.2.1/9

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımlı simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.6.2.3.1/4-5
 toplam düzgün simetrik olasılık, 2.3.1.2.6.2.3.1/3-4
 toplam düzgün olmayan simetrik olasılık, 2.3.1.3.6.2.3.1/6

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.6.4.1.1/4-5
 toplam düzgün simetrik olasılık, 2.3.1.2.6.4.1.1/3-4
 toplam düzgün olmayan simetrik olasılık, 2.3.1.3.6.4.1.1/6

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımsız simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.6.4.2.1/4-5
 toplam düzgün simetrik olasılık, 2.3.1.2.6.4.2.1/3-4
 toplam düzgün olmayan simetrik olasılık, 2.3.1.3.6.4.2.1/6

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımlı simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.6.4.3.1/4-5
 toplam düzgün simetrik olasılık, 2.3.1.2.6.4.3.1/3-4
 toplam düzgün olmayan simetrik olasılık, 2.3.1.3.6.4.3.1/6

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.6.6.1.1/4-5
 toplam düzgün simetrik olasılık, 2.3.1.2.6.6.1.1/3-4

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.6.6.1.1/6

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımsız simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.6.6.2.1/4-5
toplam düzgün simetrik olasılık, 2.3.1.2.6.6.2.1/3-4

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.6.6.2.1/6

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımlı simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.6.6.3.1/4-5
toplam düzgün simetrik olasılık, 2.3.1.2.6.6.3.1/3-4

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.6.6.3.1/6

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.6.7.1.1/6
toplam düzgün simetrik olasılık, 2.3.1.2.6.7.1.1/3-4

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.6.7.1.1/9

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımsız simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.6.7.2.1/6
toplam düzgün simetrik olasılık, 2.3.1.2.6.7.2.1/3-4

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.6.7.2.1/9

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu bağımlı simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.6.7.3.1/4-5
toplam düzgün simetrik olasılık, 2.3.1.2.6.7.3.1/3-4

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.6.7.3.1/6

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

simetrik olasılık, 2.3.1.1.9.1.1.1/7-8
toplam düzgün olmayan simetrik olasılık, 2.3.1.3.9.1.1.1/8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

herhangi bir ve son duruma bağlı simetrik olasılık, 2.3.1.1.9.2.1/7-8
toplam düzgün olmayan simetrik olasılık, 2.3.1.3.9.2.1/8

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 simetrik olasılık, 2.3.1.1.9.1.3.1/7-8
toplam düzgün olmayan simetrik olasılık, 2.3.1.3.9.1.3.1/8

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 simetrik olasılık, 2.3.1.1.9.2.1.1/12
toplam düzgün olmayan simetrik olasılık, 2.3.1.3.9.2.1.1/13

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 simetrik olasılık, 2.3.1.1.9.2.2.1/12
toplam düzgün olmayan simetrik olasılık, 2.3.1.3.9.2.2.1/13

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 simetrik olasılık, 2.3.1.1.9.2.3.1/8
toplam düzgün olmayan simetrik olasılık, 2.3.1.3.9.2.3.1/8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

herhangi bir ve son duruma bağlı simetrik olasılık, 2.3.1.1.9.2.3.1/8
toplam düzgün olmayan simetrik olasılık, 2.3.1.3.9.2.3.1/8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı

simetrik olasılık, 2.3.1.1.9.4.1.1/7-8
 toplam düzgün olmayan simetrik
 olasılık, 2.3.1.3.9.4.1.1/13

Bağımlı ve bir bağımsız olasılıklı farklı
 dizilimsiz bağımlı-bir bağımsız durumlu
 bağımsız simetrisinin ilk herhangi bir ve son
 durumunun bulunabileceği olaylara göre
 herhangi bir ve son duruma bağlı

simetrik olasılık, 2.3.1.1.9.4.2.1/7-8
 toplam düzgün olmayan simetrik
 olasılık, 2.3.1.3.9.4.2.1/13

Bağımlı ve bir bağımsız olasılıklı farklı
 dizilimsiz bağımlı-bir bağımsız durumlu
 bağımlı simetrisinin ilk herhangi bir ve son
 durumunun bulunabileceği olaylara göre
 herhangi bir ve son duruma bağlı

simetrik olasılık, 2.3.1.1.9.4.3.1/7-8
 toplam düzgün olmayan simetrik
 olasılık, 2.3.1.3.9.4.3.1/13

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

simetrik olasılık, 2.3.1.1.9.4.4.1/7-8
 toplam düzgün olmayan simetrik
 olasılık, 2.3.1.3.9.4.4.1/13

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

simetrik olasılık, 2.3.1.1.9.6.2.1/7-8
 toplam düzgün olmayan simetrik
 olasılık, 2.3.1.3.9.6.2.1/13

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

simetrik olasılık, 2.3.1.1.9.6.3.1/7-8
 toplam düzgün olmayan simetrik
 olasılık, 2.3.1.3.9.6.3.1/13

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

simetrik olasılık, 2.3.1.1.9.7.1.1/12

toplam düzgün olmayan simetrik
 olasılık, 2.3.1.3.9.7.1.1/13

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

simetrik olasılık, 2.3.1.1.9.7.2.1/12
 toplam düzgün olmayan simetrik
 olasılık, 2.3.1.3.9.7.2.1/13

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

simetrik olasılık, 2.3.1.1.9.7.3.1/8
 toplam düzgün olmayan simetrik
 olasılık, 2.3.1.3.9.7.3.1/8

Bağımlı ve bir bağımsız olasılıklı farklı
 dizilimsiz bağımlı-bağımsız durumlu
 simetrisinin ilk herhangi bir ve son durumunun
 bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.7.1.1.1/5
 toplam düzgün simetrik olasılık,
 2.3.1.2.7.1.1.1/3-4

toplam düzgün olmayan simetrik
 olasılık, 2.3.1.3.7.1.1.1/8

Bağımlı ve bir bağımsız olasılıklı farklı
 dizilimsiz bağımlı durumlu bağımsız
 simetrisinin ilk herhangi iki ve son
 durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.7.1.2.1/5
 toplam düzgün simetrik olasılık,
 2.3.1.2.7.1.2.1/3-4

toplam düzgün olmayan simetrik
 olasılık, 2.3.1.3.7.1.2.1/8

Bağımlı ve bir bağımsız olasılıklı farklı
 dizilimsiz bağımlı durumlu bağımlı
 simetrisinin ilk herhangi iki ve son
 durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.7.1.3.1/5
 toplam düzgün simetrik olasılık,
 2.3.1.2.7.1.3.1/3-4

toplam düzgün olmayan simetrik
 olasılık, 2.3.1.3.7.1.3.1/8

Bağımlı ve bir bağımsız olasılıklı farklı
 dizilimsiz bağımsız-bağımlı durumlu
 simetrisinin ilk herhangi iki ve son
 durumunun bulunabileceği olaylara göre
 simetrik olasılık, 2.3.1.1.7.2.1.1/7

toplam düzgün simetrik olasılık,
2.3.1.2.7.2.1.1/3-4

toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.7.2.1.1/12

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımsız-bağımlı durumlu
bağımsız simetrisinin ilk herhangi iki ve son
durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.7.2.2.1/7

toplam düzgün simetrik olasılık,
2.3.1.2.7.2.2.1/3-4

toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.7.2.2.1/12

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımsız-bağımlı durumlu
bağımlı simetrisinin ilk herhangi iki ve son
durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.7.2.3.1/5

toplam düzgün simetrik olasılık,
2.3.1.2.7.2.3.1/3-4

toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.7.2.3.1/8

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı-bir bağımsız durumlu
simetrisinin ilk herhangi iki ve son
durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.7.4.1.1/5

toplam düzgün simetrik olasılık,
2.3.1.2.7.4.1.1/3-4

toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.7.4.1.1/8

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı-bir bağımsız durumlu
bağımsız simetrisinin ilk herhangi iki ve son
durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.7.4.2.1/5

toplam düzgün simetrik olasılık,
2.3.1.2.7.4.2.1/3-4

toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.7.4.2.1/8

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı-bir bağımsız durumlu
bağımlı simetrisinin ilk herhangi iki ve son
durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.7.4.3.1/5

toplam düzgün simetrik olasılık,
2.3.1.2.7.4.3.1/3-4

toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.7.4.3.1/8

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı-bağımsız durumlu
simetrisinin ilk herhangi iki ve son
durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.7.6.1.1/5

toplam düzgün simetrik olasılık,
2.3.1.2.7.6.1.1/3-4

toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.7.6.1.1/8

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı-bağımsız durumlu
bağımsız simetrisinin ilk herhangi iki ve son
durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.7.6.2.1/5

toplam düzgün simetrik olasılık,
2.3.1.2.7.6.2.1/3-4

toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.7.6.2.1/8

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı-bağımsız durumlu
bağımlı simetrisinin ilk herhangi iki ve son
durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.7.6.3.1/5

toplam düzgün simetrik olasılık,
2.3.1.2.7.6.3.1/3-4

toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.7.6.3.1/8

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımsız-bağımsız durumlu
simetrisinin ilk herhangi iki ve son
durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.7.7.1.1/7

toplam düzgün simetrik olasılık,
2.3.1.2.7.7.1.1/3-4

toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.7.7.1.1/12

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımsız-bağımsız durumlu
bağımsız simetrisinin ilk herhangi iki ve son
durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.7.7.2.1/7

toplam düzgün simetrik olasılık,
2.3.1.2.7.7.2.1/3-4

toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.7.7.2.1/12

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımsız-bağımsız durumlu
bağımlı simetrisinin ilk herhangi iki ve son
durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.7.7.3.1/5

toplam düzgün simetrik olasılık,
2.3.1.2.7.7.3.1/3-4

toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.7.7.3.1/8

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

simetrik olasılık,
2.3.1.1.10.1.1.1/12-13

toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.10.1.1.1/13

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

simetrik olasılık,
2.3.1.1.10.1.2.1/12-13

toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.10.1.2.1/13

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

simetrik olasılık,
2.3.1.1.10.1.3.1/12-13

toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.10.1.3.1/13

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

simetrik olasılık,
2.3.1.1.10.2.1.1/12-13

toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.10.2.1.1/23

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

simetrik olasılık,
2.3.1.1.10.2.2.1/22

toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.10.2.2.1/23

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

simetrik olasılık,
2.3.1.1.10.2.3.1/12-13

toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.10.2.3.1/13

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

simetrik olasılık,
2.3.1.1.10.4.1.1/12-13

toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.10.4.1.1/23

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

simetrik olasılık,
2.3.1.1.10.4.2.1/12-13

toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.10.4.2.1/23

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

simetrik olasılık,
2.3.1.1.10.4.3.1/12-13

toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.10.4.3.1/23

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

simetrik olasılık,
2.3.1.1.10.6.1.1/12-13

toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.10.6.1.1/23

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

simetrik olasılık,
2.3.1.1.10.6.2.1/12-13
toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.10.6.2.1/23

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

simetrik olasılık,
2.3.1.1.10.6.3.1/12-13
toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.10.6.3.1/23

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

simetrik olasılık,
2.3.1.1.10.7.1.1/22
toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.10.7.1.1/23

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

simetrik olasılık,
2.3.1.1.10.7.2.1/22
toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.10.7.2.1/23

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

simetrik olasılık,
2.3.1.1.10.7.3.1/12-13
toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.10.7.3.1/13

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı durumlu simetrisinin ilk
herhangi iki ve son durumunun
bulunabileceği olaylara göre herhangi iki
ve son durumuna bağlı

simetrik olasılık,
2.3.1.1.11.1.1.1/16
toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.11.1.1.1/17

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı durumlu bağımsız
simetrisinin ilk herhangi iki ve son
durumunun bulunabileceği olaylara göre
herhangi iki ve son durumuna bağlı

simetrik olasılık,
2.3.1.1.11.1.2.1/16
toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.11.1.2.1/17

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

simetrik olasılık,
2.3.1.1.11.1.3.1/16
toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.11.1.3.1/17

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

simetrik olasılık,
2.3.1.1.11.2.1.1/29
toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.11.2.1.1/30

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

simetrik olasılık,
2.3.1.1.11.2.2.1/29
toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.11.2.2.1/30

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

simetrik olasılık,
2.3.1.1.11.2.3.1/16
toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.11.2.3.1/17

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

simetrik olasılık,
2.3.1.1.11.4.1.1/16
toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.11.4.1.1/30
Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı-bir bağımsız durumda
bağımsız simetrisinin ilk herhangi iki ve son
durumunun bulunabileceği olaylara göre
herhangi iki ve son durumuna bağlı
simetrik olasılık,
2.3.1.1.11.4.2.1/16
toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.11.4.2.1/30
Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı-bir bağımsız durumda
bağımlı simetrisinin ilk herhangi iki ve son
durumunun bulunabileceği olaylara göre
herhangi iki ve son durumuna bağlı
simetrik olasılık,
2.3.1.1.11.4.3.1/16
toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.11.4.3.1/30
Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı-bağımsız durumda
simetrisinin ilk herhangi iki ve son
durumunun bulunabileceği olaylara göre
herhangi iki ve son durumuna bağlı
simetrik olasılık,
2.3.1.1.11.6.1.1/16
toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.11.6.1.1/30
Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı-bağımsız durumda
bağımsız simetrisinin ilk herhangi iki ve son
durumunun bulunabileceği olaylara göre
herhangi iki ve son durumuna bağlı
simetrik olasılık,
2.3.1.1.11.6.2.1/16
toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.11.6.2.1/30
Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı-bağımsız durumda
bağımlı simetrisinin ilk herhangi iki ve son
durumunun bulunabileceği olaylara göre
herhangi iki ve son durumuna bağlı
simetrik olasılık,
2.3.1.1.11.6.3.1/16
toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.11.6.3.1/30

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımsız-bağımsız durumda
simetrisinin ilk herhangi iki ve son
durumunun bulunabileceği olaylara göre
herhangi iki ve son durumuna bağlı
simetrik olasılık,
2.3.1.1.11.7.1.1/29
toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.11.7.1.1/30
Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımsız-bağımsız durumda
bağımsız simetrisinin ilk herhangi iki ve son
durumunun bulunabileceği olaylara göre
herhangi iki ve son durumuna bağlı
simetrik olasılık,
2.3.1.1.11.7.2.1/29
toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.11.7.2.1/30
Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımsız-bağımsız durumda
bağımlı simetrisinin ilk herhangi iki ve son
durumunun bulunabileceği olaylara göre
herhangi iki ve son durumuna bağlı
simetrik olasılık,
2.3.1.1.11.7.3.1/16
toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.11.7.3.1/17

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 dağılımlarında, simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre toplam düzgün simetrik olasılığın, tanım ve eşitliklerinden oluşmaktadır.

VDOİHİ Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu olasılığının ilk herhangi iki ve son durumunun bulunabileceği olaylara göre toplam düzgün simetrik olasılık kitabında, bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz dağılımlarda, simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre toplam düzgün simetrik olasılığın, tanım ve eşitlikleri verilmektedir.

VDOİHİ’nin diğer ciltlerinde olduğu gibi bu ciltte de verilen ana eşitlikler, olasılık tablolarından elde edilen verilerle üretilmiştir. Diğer eşitlikler ise ana eşitliklerden teorik yöntemle üretilmiştir. Eşitlik ve tanımların üretilmesinde başka kaynak kullanılmamıştır.

GÜLDÜNKAYA