

VDOİHİ

Bağımlı ve Bir Bağımsız Olasılıklı
Farklı Dizilimsiz Bağımlı Durumlu
Simetrinin İlk ve Son Durumunun
Bulunabileceği Olaylara Göre Toplam
Düzensiz Olmayan Simetrik Olasılık

Cilt 2.3.1.3.2.1.1.3

İsmail YILMAZ

Matematik / İstatistik / Olasılık

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VDOİHİ Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrisinin ilk ve son durumunun bulunabileceği olaylara göre toplam düzgün olmayan simetrik olasılık Cilt 2.3.1.3.2.1.1.3

İsmail YILMAZ

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

Dili: Türkçe + Matematik Mantık



K. Atatürk

Türkiye Cumhuriyeti Devleti
Kuruluşunun
100. Yılı Anısına

Yazar Hakkında

İsmail YILMAZ; Hamzabey Köyü, Yeniçağa, Bolu'da 1973 yılında doğdu. İlkokulu köyünde tamamladıktan sonra, ortaokulu Yeniçağa ortaokulunda tamamladı. Liseyi Ankara Ömer Seyfettin ve Gazi Çiftliği Liselerinde okudu. Lisans eğitimini Çukurova Üniversitesi Fen Edebiyat Fakültesi Fizik bölümünde, yüksek lisans eğitimini Sakarya Üniversitesi Fen Bilimleri Enstitüsü Fizik Anabilim Dalında ve doktora eğitimini Gazi Üniversitesi Eğitim Bilimleri Enstitüsü Fen Bilgisi Eğitimi Anabilim Dalında tamamladı. Fen Bilgisi Eğitiminde; Newton'un hareket yasaları, elektrik ve manyetizmanın prosedürel ve deklaratif bilgi yapılarıyla birlikte matematik mantık yapıları üzerine çalışmalar yapmıştır. Yazarın farklı alanlarda yapmış olduğu çalışmalar arasında ölçme ve değerlendirmeye yönelik çalışmaları da mevcuttur.

VDOİHİ

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- ✓ Bilgi merkezli değerlendirme yöntemidir.

Sanırım bilgi ve teknolojideki kaderimiz veriyle ilişkilendirilmiş.

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GÜLDÜNYA

Simge ve Kısaltmalar

n : olay sayısı

n : bağımlı olay sayısı

m : bağımsız olay sayısı

l : bağımsız durum sayısı

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

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$f_Z S_{j^{sa}}$: 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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${}^0 f_Z S_{j_s,j_i}$: 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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$fzS_{j_i}^{DSD}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu

simetrisinin son durumunun bulunabileceği olaylara göre toplam düzgün simetrik olasılık

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

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

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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-büyüğe sıralama için verilen eşitliklerde kullanılan durum sayısının düzenlenmesiyle, büyükten-küçüğe sıralama durumlarının eşitlikleri elde edilebilir.

Farklı dizilimli dağılımlar, dağılımın ilk durumuyla başlayan (bunun yerine farklı dizilimli dağılımlarda simetriden ilk durumuyla başlayan dağılımlar), dağılımın ilk durumu hariçinde dağılımın herhangi bir durumuyla başlayan dağılımlar (bunun yerine farklı dizilimli dağılımlarda simetride bulunmayan bir durumuyla başlayan dağılımlar) ve dağılımın ilk durumu hariçinde ilk dağılımının 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 tanımlanma 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 adlandırılmalar kullanılacaktır. Bu adlandırılmaya 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 büyükten-küçükçe sıralanan dağılımlar için de simetrik olasılık eşitlikleri elde edilecektir.

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

SİMETRİDEN SEÇİLEN İKİ DURUMA GÖRE DÜZGÜN OLMAYAN SİMETRİK OLASILIK

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

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

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

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

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

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

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

$$s \geq 2 \wedge s = s \Rightarrow$$

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

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

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

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

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

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

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

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

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

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

$$s \geq 2 \wedge s = s \Rightarrow$$

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

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

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

$$l_s > j_i - s + 1 \wedge$$

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

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

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

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

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

$$s \geq 2 \wedge s = s \Rightarrow$$

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

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

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

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

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

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

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

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

$$j_{sa}^s \leq j_{sa}^i \wedge$$

$$s \in \{j_{sa}^s, j_{sa}^i\} \wedge$$

$$s \geq 2 \wedge s = s \Rightarrow$$

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

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

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

$$\begin{aligned} & ((D \geq n < n \wedge l_s > D - n + 1 \wedge \\ & 2 \leq j_s \leq j_i - s + 1 \wedge \\ & j_s + s - 1 \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik}) \vee \\ & (D \geq n < n \wedge l_s > D - n + 1 \wedge \\ & 2 \leq j_s \leq j_i - s + 1 \wedge \\ & j_s + s - 1 \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik}) \vee \\ & ((D \geq n < n \wedge l_s > D - n + 1 \wedge \\ & 2 \leq j_s \leq j_i - s + 1 \wedge \\ & j_s + s - 1 \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik})) \wedge \\ & D \geq n < n \wedge I = \mathbb{k} = 0 \wedge \\ & j_{sa}^s \leq j_{sa}^i - 1 \wedge \end{aligned}$$

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

$$s \geq 2 \wedge \mathbf{s} = s \Rightarrow$$

$$\begin{aligned}
 f_{j_s, j_i}^{DOSD} = & \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(j_i-s+1)} \sum_{j_i=l_i+n-D}^{l_s+s-k} \\
 & \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - 1)!}{(j_i - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + 1)! \cdot (j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)} \sum_{j_i=l_s+s-k+1}^{l_i-k+1} \\
 & \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}
 \end{aligned}$$

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

$$\begin{aligned} & ((D \geq n < n \wedge l_s > D - n + 1 \wedge \\ & 2 \leq j_s \leq j_i - s + 1 \wedge \\ & j_s + s - 1 \leq j_i \leq n \wedge \\ & (l_i - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik}) \vee \\ & (D \geq n < n \wedge l_s > D - n + 1 \wedge \\ & 2 \leq j_s \leq j_i - s + 1 \wedge \\ & j_s + s - 1 \leq j_i \leq n \wedge \\ & (l_i - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik}) \vee \\ & (D \geq n < n \wedge l_s > D - n + 1 \wedge \\ & 2 \leq j_s \leq j_i - s + 1 \wedge \\ & j_s + s - 1 \leq j_i \leq n \wedge \end{aligned}$$

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

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

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

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

$$s \geq 2 \wedge s = s \Rightarrow$$

$$fz S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_i+n-D-s+1)}^{(l_i+n-D-s)} \sum_{j_i=l_i-k+1}^{l_i-k+1} \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(j_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{D-n+1} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)} \sum_{j_i=j_s+s-1}^{l_i-k+1} \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

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

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

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

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

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

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

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

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

$j_s + s - 1 \leq j_i$

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

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

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

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

$s \geq 2 \wedge s = s \Rightarrow$

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

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

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

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

$2 \leq j_s \leq j_i - s + 1 \wedge$

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

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

$D \geq n < n \wedge l = k = 1 \wedge$

$j_{sa}^s \leq j_{sa}^i \wedge$

$s: \{i, j\} \wedge$

$s \geq 2 \wedge s = \dots \Rightarrow$

$$fz_{j_s, j_i}^{DOSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_i+n-D-s)} \sum_{j_i=l_i+n-D}^{l_i-k+1} \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i}$$

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

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

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

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

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

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

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

$2 \leq j_s \leq j_i - s + 1 \wedge$

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

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

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

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

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

$s \geq 2 \wedge s = \dots \Rightarrow$

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

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

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

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

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

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

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

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

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

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

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

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

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

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

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

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

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

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

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

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

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

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

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

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

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

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

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

$$s \geq 2 \wedge s = s \Rightarrow$$

$$fz S_{j_s, j_i}^{DOSD} = \sum_{k=0}^{D-n+1} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_{sa}+n-D-j_{sa}^i)} \sum_{j_i=l_{sa}+n+s-D-j_{sa}^i}^{l_{sa}+s-k-j_{sa}^i+1}$$

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

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

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

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

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

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

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

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

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

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

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

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

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

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

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

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

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

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

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

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

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

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

$$s: \{j_{sa}^s, j_{sa}^i\}$$

$$s \geq 2 \wedge s = s =$$

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

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

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

$$\sum_{k=1}^{D-n+1} \sum_{(j_s=l_s-k, \dots, D)} \sum_{(j_i=l_s+s-k, \dots, i_{sa}+1)}$$

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

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

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

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

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

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

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

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

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

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

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

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

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

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

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

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

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

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

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

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

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

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

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

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

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

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

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

$$s: \{j_{sa}^s, j_{sa}^i\}$$

$$s \leq 2 \wedge s = s \Rightarrow$$

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

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

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

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

$1 \leq j_s \leq j_i - s + 1 \wedge$

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

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

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

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

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

$s: \{j_{sa}^s\} \wedge$

$s \geq 2 \wedge s =$

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

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(l_i)!}{(D + j_i - n - l_i)! \cdot (j_i)!} + \sum_{k=1}^{i-1} \sum_{s=2}^{l_i - k - j_s^{ik} + 2} \sum_{j_i = j_s^{ik} + 2}^{l_i - k + 1} \frac{(n_i - n_{is} - 1)!}{(i - j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{i-1} \sum_{j_s=1}^{l_i - i^{l+1}} \sum_{j_i=s}^{l_i - i^{l+1}}$$

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

GÜLDÜZÜM

$$\frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!}$$

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

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - 1)!}$$

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

$$\sum_{k=1}^{l-1} \sum_{(j_s=j_i-k+1)}^{(n_i+k+s-j_i-j_s+1)} \sum_{j_i=s+1}^{n_i+k+1}$$

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

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

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

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

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

$$\sum_{k=i}^{(n)} \sum_{(j_s=1)}^{(n)} \sum_{j_i=s}$$

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

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

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

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

GÜLDENWA

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

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

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

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

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

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

$$s \geq 2 \wedge s = s \Rightarrow$$

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

$$\frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!}$$

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

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - j_s - 1)!}$$

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

$$\sum_{k=1}^{l-1} \sum_{i=2}^{l-k} \sum_{j_i=j_s+1}^{n_i-j_s+1}$$

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

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

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

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

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

$$\sum_{k=i}^{l} \sum_{(j_s=1)}^{()} \sum_{j_i=s}$$

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

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

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

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

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

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

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

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

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

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

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

$$s \geq 2 \wedge s = s \Rightarrow$$

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

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

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

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

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

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

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

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

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

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

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

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

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

$$s \geq 2 \wedge s = s =$$

$$fz S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i^{l-1} (l_i + n - D - s)} \sum_{(j_s=2)}^{l_i - k + 1} \sum_{j_i=l_i+n-D}^{n_i - j_s + 1} \sum_{n_i=n}^{n_{is}+j_s-j_i} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

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

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

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

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

$$1 \leq j_i \leq j_i - s + 1$$

$$j_s - s - 1 \leq j_i \leq n \wedge$$

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

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

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

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

$$s \geq 2 \wedge s = s \Rightarrow$$

$$fz^D S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(j_i-s+1)} \sum_{j_i=l_{ik}+n+s-D-j_{sa}^{ik}}^{l_s+s-k}$$

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

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

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

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

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

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

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

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

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

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

$$s \geq 2 \wedge s = s \Rightarrow$$

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

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

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

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

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot$$

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

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{j_s=l_{ik}+n-D-j_{sa}^{ik}+1}^{l_s-k+1} \sum_{j_i=j_s+s-1}^{n_{is}+j_s-l-j_{sa}^{ik}+1}$$

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

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

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

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!} \cdot$$

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

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{j_s=l_{ik}+n-D-j_{sa}^{ik}+1}^{l_s-k+1} \sum_{j_i=j_s+s-1}^{n_{is}+j_s-l-j_{sa}^{ik}+1}$$

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

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

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

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

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

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

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

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

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

$$l_i \leq D + s - n) \vee$$

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

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

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

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

$$l_{ik} \leq D + j_{sa}^{ik} - n) \vee$$

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

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

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

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

$$l_i \leq D + s - n) \vee$$

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

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n) \vee$$

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

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

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

$$l_i - s + 1 > l_s \wedge$$

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

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

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

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

$$s \geq 2 \wedge s = s \Rightarrow$$

$$f_z^S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i^{l-1} (j_i - s)} \sum_{j_s=2}^{l_s + s - k} \sum_{s=s+1}^n \sum_{n_i=n-j_s+1}^{n_i-j_s+1} \sum_{n_s=n-j_i+1}^{n_s+j_s-j_i} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{i^{l-1} (l_s - k + 1)} \sum_{j_s=2}^{l_i - k + 1} \sum_{j_i=l_s + s - k + 1}^n \sum_{n_i=n-j_s+1}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

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

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

$$\sum_{k=1}^n \sum_{(j_s=1)}^{()} \sum_{j_i=1}^{()} \frac{(n_s - j_i - j_s - s)!}{(n + j_i - n - j_s)! \cdot (n - s)!} \cdot \frac{(D + s - n - l_i)!}{(n - s)!}$$

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

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

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

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

$$l_i \leq D + s - n) \vee$$

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

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

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

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

$$l_{ik} \leq D + s - n) \vee$$

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

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

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

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

$$l_i \leq D + s - n) \vee$$

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

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

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

$$l_i - s + 1 > l_s \wedge$$

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

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

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

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

$$s \geq 2 \wedge s = s \Rightarrow$$

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

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

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

$$\sum_{n_i=\mathbf{n}+lk}^n \sum_{(n_{ik}=n_i+j_{sa}^s-j_s-j_{sa}^{ik}+1)}^{(\cdot)} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^{-lk})} \sum_{k=i}^{(\cdot)} \sum_{(j_s=1)} \sum_{j_i=s} \frac{(n_s + j_i - j_s - s)!}{(n_s + j_i - \mathbf{n} - j_{sa}^s)! \cdot (\mathbf{n} - s)!}$$

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

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

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

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

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

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

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

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

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

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

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1) \vee$$

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

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

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

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

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1) \vee$$

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

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

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

$$l_i - s + 1 > l_s$$

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

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

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

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

$$s \geq 2 \wedge s = s \Rightarrow$$

$$\begin{aligned}
f_z S_{j_s, j_i}^{DOSD} &= \sum_{k=1}^{i^{l-1} (j_i - s + 1)} \sum_{(j_s=2)}^{l_s + s - k} \sum_{j_i = l_i + n - D}^{n_i - j_s + 1} \\
&\sum_{n_i = n}^n \sum_{(n_{is} = n - j_s + 1)}^{n_i + j_s - j_i} \sum_{n_s = n - j_i}^{n_i - n_{is} - 1} \\
&\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
&\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
&\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
&\frac{(l_s - j_s - k + 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
&\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
&\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!} + \\
&\sum_{k=1}^{i^{l-1} (l_s - k + 1)} \sum_{(j_s=2)}^{l_i - k + 1} \sum_{j_i = l_s + s - k + 1}^{n_i - j_s + 1} \\
&\sum_{n_i = n}^n \sum_{(n_{is} = n - j_s + 1)}^{n_i + j_s - j_i} \sum_{n_s = n - j_i + 1}^{n_i - n_{is} - 1} \\
&\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
&\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
&\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
&\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
&\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot
\end{aligned}$$

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

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

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

$$\frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - j_i + 1)!} \cdot$$

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

$$\frac{(l_i - j_i - 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!} \cdot$$

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

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

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

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

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

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

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

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

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

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

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

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

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

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

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

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

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1) \vee$$

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

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

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

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

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

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

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

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

$$l_i - s + 1 > l_s \wedge$$

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

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

$$j_{sa}^s \leq j_{sa}^i \wedge$$

$$s: \{i, j\} \wedge$$

$$s \geq 2 \wedge s = \Rightarrow$$

$$fz S_{j_s j_i}^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(l_i+n-D-s)} \sum_{j_i=l_i+n-D}^{l_i-k+1} \\ \sum_{n_i=n}^n \sum_{(n_{i_s}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{i_s}+j_s-j_i}$$

$$\begin{aligned}
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{k=0}^{i-1} \sum_{j_s=l_i+k}^{l_s-k+1} \sum_{j_i=j_s+s-1}^{n-j_s-1} \\
& \sum_{n_{is}=n-j_s+1}^{n_i-j_s+1} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i}
\end{aligned}$$

$$\sum_{k=0}^{i-1} \sum_{j_s=1}^{l_i-k} \sum_{j_i=l_i+n-D}^{l_i-k+1}$$

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

$$\frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!}$$

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

$$\frac{(l_i - l_s - s - 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!}$$

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

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

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

$$\sum_{n_{is}=\mathbf{n}+j_{sa}^s - j_{sa}^{ik}}^{(\cdot)} (n_s = n_{ik} + j_s + j_{sa}^{ik} - j_i - j_{sa}^{ik} - \mathbb{k})$$

$$\frac{(n_s + j_i - j_s - s)!}{(l_s + j_i - \mathbf{n} - j_{sa}^s)! \cdot (\mathbf{n} + j_{sa}^s - j_s - s)!}$$

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

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

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

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$l_s - s \leq j_i \leq \mathbf{n} \wedge$$

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

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

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

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

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

$$s \geq 2 \wedge s = s \Rightarrow$$

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

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

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

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

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

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

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

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

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

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

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

$$s \geq 2 \wedge s = s \Rightarrow$$

$$fz \sum_{j_s, j_i}^{DOSD} \sum_{i=1}^{i-1} \sum_{(j_s=2)}^{n-D-s} \sum_{j_i=l_i+n-D}^{l_i-k+1} \sum_{n_i=n}^{(n_i-j_s+1)} \sum_{(n_{is}=n-j_s+1)}^{n_{is}+j_s-j_i} \sum_{n_s=n-j_i+1}^{(n_s-1)!} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

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

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

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

$1 \leq j_s \leq j_i - s + 1 \wedge$

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

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

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

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

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

$s: \{j_{sa}^s\} \wedge$

$s \geq 2 \wedge s =$

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

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

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$$\frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!}$$

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

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - l_s + 1)!}$$

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

$$\sum_{k=1}^{D+l_s+s-n-l_i} \binom{D+l_s+s-n-l_i}{k} \sum_{j_s=j_i-s+1}^{n-l_i} \sum_{j_i=l_{sa}+n+s-D-k+1}^{n-l_i} \binom{n-l_i}{j_i} \binom{n-l_i}{j_s}$$

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

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

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

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

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

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

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + 1 \leq j_i - s + 1 \wedge$$

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

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

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

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

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

$$s \geq 2 \wedge s = s \Rightarrow$$

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

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot$$

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

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

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

$$\frac{(n_s - n_s - 1)!}{(i_s - 2)! \cdot (n_s - j_i + 1)!} \cdot$$

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

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!} \cdot$$

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

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

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

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

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

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

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

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

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

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

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

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

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

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

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

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

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

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

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

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

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

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

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

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

$$s: \{j_{sa}^s, j_{sa}^i\}$$

$$s \geq 2 \wedge s = s =$$

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

$$\begin{aligned}
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s - 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{k=1}^{i-1} \sum_{j_s=1}^{l_s - l_s + s - i - l_s + 1} \sum_{j_i=l_s+s-k}^{n_s+l_s-k} \\
& \sum_{n_i=n}^{n_i-j_s} \sum_{n_s=n-j_s+1}^{n_s+j_s-j_i} \\
& \frac{(n_i - n_s - 1)!}{(j_s - 2)! \cdot (n_i - n_s - j_s + 1)!} \cdot \\
& \frac{(n_s - n_s - 1)!}{(j_s - 2)! \cdot (n_s + j_s - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=i}^{l_i} \sum_{j_s=1}^{l_s + s - i - j_s + 1} \sum_{j_i=l_s+n+s-D-j_s}^{n} \\
& \sum_{n_i=n}^n \sum_{n_s=n-j_i+1}^{(n_i-j_i+1)} \\
& \frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!} \cdot
\end{aligned}$$

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

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!}$$

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

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

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

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

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

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

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

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

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

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

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

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

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

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

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

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

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

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

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

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

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

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

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

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

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

$$s \geq 2 \wedge s = s \Rightarrow$$

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

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

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

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

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

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

$$\frac{(l_i - l_s - s - 1)!}{(j_s + l_i - l_s - s - 1)! \cdot (i - j_s - s + 1)!}$$

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

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

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

$$\frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!}$$

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

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!}$$

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

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

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

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

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

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

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

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

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

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

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

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

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

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

$$s = 2 \wedge s = \mathbb{k} + 1 \wedge$$

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

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

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

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

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

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

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{ik}+n-D-j_{s\bar{a}}^{ik}+1)}^{(l_{ik}-k-j_{s\bar{a}}^{ik}+2)} \sum_{(i=l_{ik}+s-k-j_{s\bar{a}}^{ik})}^{(l_i-k)} \frac{(n_i-j_s+1)!}{(j_s-2)!} \cdot \frac{(n_{is}+j_s-j_i-k)!}{(n_i-n_{is}-j_s+1)!} \cdot \frac{(n_s-n_s-1)!}{(n_{is}+j_s-n_s-j_i)!}$$

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

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_i-s+1)}^{()} \sum_{j_i=l_i+n-D}^{l_{ik}+s-k-j_{s\bar{a}}^{ik}+1} \frac{(n_i-j_s+1)!}{(n_i-n_{is}-j_s+1)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_i-s+1)}^{()} \sum_{j_i=l_i+n-D}^{l_{ik}+s-k-j_{s\bar{a}}^{ik}+1} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}$$

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

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

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

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

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

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

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

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

$$s = 2 \wedge s = s + \mathbb{k} \wedge$$

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

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

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

$$\sum_{k=1}^{D-n+1} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{ik-k-j_{sa}^{ik}+2})} \sum_{j_i=j_s+s-1}^{l_i-k+1} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{j_i-k}$$

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

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

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

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

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

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

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

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

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

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

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

$$s = 2 \wedge s = s + \mathbb{k} \wedge$$

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

$fz S_{j_s, j_i}^{DOSD}$

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

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

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

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

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

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

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

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

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

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

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

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

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

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

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

$$s: \{j_{sa}^s, k, j_{sa}^l\} \wedge$$

$$s = 2 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

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

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

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

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

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

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

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

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

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

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

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

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

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

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

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

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

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

$$s = 2 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

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

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

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

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

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

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

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

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

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

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

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

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

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

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

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

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

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

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

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

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

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

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

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

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

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

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

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

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

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

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

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

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

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

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

$$s: \{j_{sa}^s, k, j_{sa}^s\}$$

$$s = n - k = s + k \wedge$$

$$k_z: z = 1 =$$

$$fz S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_i+n-D-s)} \sum_{j_i=l_i+n-D}^{l_i-k+1} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)} \sum_{j_i=j_s+s-1}^{k+1} \sum_{n_i=n+l_s-j_s+1}^{(n_i-j_s+1)} \sum_{n_{is}=n+l_s-j_s+1}^{n_{is}+j_s-j_i-k} \sum_{n_s=n-j_i+1}^{n_s} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

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

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

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

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

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

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

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

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

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

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

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

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

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

$$s = 2 \wedge s = \mathbb{k} + 1 \wedge$$

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

$$f_z \mathcal{S}_{j_s, j_i}^{DOSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(j_i-s+1)} \sum_{j_i=l_i+n-D}^{l_{sa}+s-k-j_{sa}+1}$$

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

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

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

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

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

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

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

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

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_i-s+1)}^{()} \sum_{j_i=l_i+n-D}^{l_{sa}+s-k-j_{sa}+1} \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

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

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

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

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

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

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

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

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

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

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

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

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

$$s = 2 \wedge s = s + \dots \wedge$$

$$k: z = 1 = \dots$$

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

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

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

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

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

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

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

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

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

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

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

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

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

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

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

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

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

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

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

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

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

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

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

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

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

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

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

$$s = 2 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$f_z^{DOSD} = \sum_{k=0}^{D-1} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(j_i-s+1)} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{ik}+s-k-j_{sa}^{ik}+1}$$

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

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

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

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

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

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

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

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

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

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

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

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

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

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

$$s: \{j_{sa}^s, k, j_{sa}^l\} \wedge$$

$$s = 2 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

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

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

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

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

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

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

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

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

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

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

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

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

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

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

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

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

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

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

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

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

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

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

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

$$s = 2 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

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

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

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

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

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

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

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

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

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

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

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

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

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

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

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

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

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

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

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

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

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

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

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

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

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

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

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

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

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

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

$$s: \{j_{sa}^s, k, j_{sa}^s\} \wedge$$

$$s = j_s - k = s + k \wedge$$

$$k_z: z = 1 =$$

$$f_z S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_{sa}+n-D-j_{sa})} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{sa}+s-k-j_{sa}+1} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k}$$

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

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

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

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

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

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

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

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

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

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

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

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

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

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

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

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

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

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

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

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

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

$1 \leq j_s \leq j_i - s + 1 \wedge$

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

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

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

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

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

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

$s = 2 \wedge s = s + 1$

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

$$fz_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(j_i-s+1)} \sum_{j_i=s+1}^{l_{ik}+s-k-j_{sa}^{ik}+1}$$

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

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

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(l_i)!}{(D + j_i - n - l_i)! \cdot (j_i)!} + \sum_{k=1}^{i-1} \sum_{s=2}^{l_i-k-j_s+2} \sum_{n_i=n+l_k}^{n_i=n+l_k-j_s+1} \sum_{n_s=n-j_i+1}^{n_s=n-j_i-l_k} \frac{(n_i - n_{is} - 1)!}{(i - l)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{i-1} \sum_{l=1}^{l_i - i + 1} \sum_{j_s=1}^{l_i - i + 1}$$

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

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$$\frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!}$$

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

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - 1)!}$$

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

$$\sum_{k=1}^{l-1} \sum_{(j_s=j_i-k+1)}^{(n_i+k+s-j_i-j_s+1)} \sum_{j_i=s+1}^{n_i+k+1}$$

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

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

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

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

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

$$\sum_{k=i}^{(n)} \sum_{(j_s=1)}^{(n)} \sum_{j_i=s}$$

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

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

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

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

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

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

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

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

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

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

$$s = 2 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

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

$$\sum_{k=1}^{i-1} \sum_{j_s=1}^{l_i - i + 1} \sum_{j_i=s}$$

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

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$$\frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!}$$

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

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - j_s - 1)!}$$

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

$$\sum_{k=1}^{l-1} \sum_{j=2}^{l-k} \sum_{j_i=j_s+k}$$

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

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

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

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

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

$$\sum_{k=i}^{(j_s=1)} \sum_{j_i=s}$$

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

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

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

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

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$$1 \leq j_s \leq j_i - s + 1 \wedge$$

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

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

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

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

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

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

$$s = 2 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

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

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

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

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

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

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

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

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

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

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

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

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

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

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

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

$$s = 2 \wedge s = s + 1$$

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

$$fz S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(l_i+n-D-s)} \sum_{j_i=l_i+n-D}^{l_i-k+1}$$

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

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

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(l_i)!}{(D + j_i - n - l_i)! \cdot (j_i)!} + \sum_{k=0}^{i-1} \sum_{j_i=l_i+k}^{(l_{ik}-k-1)+1} \sum_{j_s=s-1}^{l_i-k+1} \sum_{n_i=n+l_k}^n \sum_{n_s=n+l_k-j_s+1}^{n_{is}+j_s-j_i-k} \frac{(n_i - n_{is} - 1)!}{(i - l)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=0}^i \sum_{j_s=1}^{()} \sum_{j_i=l_i+n-D}^{l_i-i+1} \sum_{n_i=n+l_k}^n \sum_{n_s=n-j_i+1}^{(n_i-j_i-k+1)}$$

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$$\frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!}$$

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

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - 1)!}$$

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

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+k, \dots, j_i=j_s+k)}^{(l_{ik}-l_{is}^{ik}+2)}$$

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

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

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

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

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

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

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

$$j_s + 1 \leq j_i - 1$$

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

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

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

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

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

$$s = 2 \wedge s = s + \mathbb{k} \wedge$$

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

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

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

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

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

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

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

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

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

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

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

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

$$s = 2 \wedge s = s + \mathbb{k} \wedge$$

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

$$\sum_{j_s, j_i}^{DOS} \sum_{k=0}^{l-1} \frac{(l_{ik} + D - j_{sa}^{ik})^{l-1-k} \cdot l_{ik}^{k-1} \cdot l_{ik}^{l-1-k} \cdot (D - j_{sa}^{ik})^{l-1-k}}{(j_s - 2)! \cdot (n - j_s - 1)!}$$

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

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

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

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

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

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

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

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

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

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

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

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s \leq j_i \leq n) \vee$$

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

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

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

$$l_i - s + 1 > l_s \wedge$$

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

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

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

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

$$s = 2 \wedge s = s + \mathbb{k} \wedge$$

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

$$f_{j_s, j_i}^{SDSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)} \sum_{j_i=s+1}^{l_s+s-k}$$

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

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

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

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

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

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

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

$$\sum_{k=1}^{i^{l-1} (l_s - k + 1)} \sum_{(j_s=2)}^{l_i - k + 1} \sum_{j_i = l_s + s - k + 1}$$

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

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

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

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

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

$$\frac{(l_i - l_s - s + 1)!}{(j_s - l_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot$$

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

$$\sum_{k=i^l}^{()} \sum_{(j_s=1)}^{l_i - i^{l+1}} \sum_{j_i = s}$$

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

$$\frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!} \cdot$$

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

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!} \cdot$$

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

GÜLDEN

$$\sum_{k=1}^{i^{l-1}} \sum_{(j_s=j_i-s+1)}^{(\cdot)} \sum_{j_i=s+1}^{l_s+s-k}$$

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

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_{sa}^s-l_k)}^{(\cdot)}$$

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

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

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

$$\sum_{k=i^l} \sum_{(j_s=1)}^{(\cdot)} \sum_{j_i=s}$$

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

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

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

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

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

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

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

$$l_i \leq D + s - n) \vee$$

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

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

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

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

$$l_{ik} \leq D + j_{sa}^{ik} - n) \vee$$

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

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

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

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

$$l_i \leq D + s - n) \vee$$

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

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

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

$$l_i - s + 1 > l_s \wedge$$

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

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

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

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

$$s = 2 \wedge s = \mathbb{k} + 1 \wedge$$

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

$$f_z S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(l_s-k+1)} \sum_{j_i=j_s+s-1}^{l_i-k+1}$$

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

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

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

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

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

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s - 1)!} \cdot$$

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

$$\sum_{i=1}^l \sum_{j_s=1}^{i^{l+1}} \sum_{n_i=n+l_k}^{n-(n_i-j_i-l_k+1)} \sum_{(n_s=n+l_k-j_i+1)}^{(n_s-1)!} \cdot$$

$$\frac{(n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!} \cdot$$

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

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!} \cdot$$

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

$$\sum_{k=1}^{i^{l-1} (l_s - k + 1)} \sum_{(j_s=2)} \sum_{j_i=j_s+s-1} \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \cdot$$

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

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

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

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

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

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

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

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

$$l_i - s + 1 > l_s \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa}^s = j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, k, j_{sa}^i\} \wedge$$

$$s = 2 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$f_z^{S_{j_s}^{CD}} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(j_i-s+1)} \sum_{j_i=l_i+n-D}^{l_s+s-k} \sum_{n_i=n-k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(l_s-k+1)} \sum_{j_i=l_s+s-k+1}^{l_i-k+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - l_s - s + 1)! \cdot (j_i - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{()} \sum_{(j_s=1)}^{l_i - i^{l+1}} \sum_{j_i=l_i+n-D}$$

$$\sum_{n_i=n+k}^n \sum_{(n_s=n-j_i+1)}^{(n_i-j_i-k+1)}$$

$$\frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_i-s+1)}^{()} \sum_{j_i=l_i+n-D}^{l_s+s-k}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s)}^{()}$$

$$\frac{(n_s + j_i - j_s - s)!}{(n_s + j_i - n - j_{sa}^s)! \cdot (n + j_{sa}^s - j_s - s)!}$$

$$\frac{(l_s - k - 1)! \cdot (l_s - 2)!}{(l_s - j_s - 1)! \cdot (l_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - l_i)! \cdot (n - j_i)!}$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa}^s = j_{sa}^l - 1 \wedge$$

$$s: \{j_{sa}^s, k, j_{sa}^l\} \wedge$$

$$s = 2 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$fz S_{j_s, j_l}^{DO} = \sum_{i=1}^{l-1} \sum_{j_s=l_i+n-D-s}^{l_i-k+1} \sum_{n_i=n+k}^{n} \sum_{n_{is}=n+k-j_s+1}^{n_{is}+j_s-j_i-k} \sum_{n_s=n-j_i+1}^{n_s} \frac{(n_i - n_{is} - 1)!}{(i-2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{l-1} \sum_{j_s=l_i+n-D-s+1}^{l_s-k+1} \sum_{j_i=j_s+s-1}^{l_i-k+1} \sum_{n_i=n+k}^n \sum_{n_{is}=n+k-j_s+1}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - 1)!}{(j_s + l_i - j_i - 1)! \cdot (j_i - j_s + 1)!}$$

$$\frac{(n - l_i)!}{(n - l_i - 1)! \cdot (n - j_i)!}$$

$$\sum_{k=0}^{l+1} \sum_{j_s=1}^{n-l_s-k} \sum_{j_i=l_i+n-D}$$

$$\sum_{n_i=n+l_k}^n \sum_{n_s=n-j_i+1}^{(n_i-j_i-l_k+1)}$$

$$\frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)} \sum_{j_i=j_s+s-1}$$

$$\sum_{n_i=n+l_k}^n \sum_{n_{is}=n+l_k-j_s+1}^{(n_i-j_s+1)}$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-k)}^{(\cdot)}$$

$$\frac{(n_s + j_i - j_s - s)!}{(n_s + j_i - n - j_{sa}^s)! \cdot (n + j_{sa}^s - j_s - s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - \dots)!}$$

$$\frac{(D - l_s - k)!}{(D + j_i - n - l_s)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa}^{ik} \wedge l_i + j_s - s > l_s \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa}^s = j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, k, j_{sa}^i\} \wedge$$

$$s = 2 \wedge s = s + 1 \wedge$$

$$k: z = 1 =$$

$$fz S_{j_s j_i}^{DOSD} = \sum_{k=1}^{i^{l-1} (j_i - s + 1)} \sum_{(j_s=2)}^{l_{sa} + s - k - j_{sa} + 1} \sum_{j_i=l_i+n-D}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\begin{aligned}
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{i^{l-1}} \sum_{(j_s=2)}^{(l_{sa}-k-j_{sa}+2)} \sum_{j_i=l_{sa}+s-k}^{l_i-k+1} \sum_{j_s=j_{sa}+2}^{j_i-k} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-1)}^{(n-j_s+1)} \sum_{n_s=n-j_i+1}^{j_i-k} \\
 & \frac{(n_i - n_s - 1)!}{(j_s - 1)! \cdot (n_i - n_s - 1)! \cdot (n_s + 1)!} \cdot \\
 & \frac{(n_{is} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{()} \sum_{(j_s=1)}^{l_i - i^{l+1}} \sum_{j_i=l_i+n-D} \\
 & \sum_{n_i=n+k}^n \sum_{(n_s=n-j_i+1)}^{(n_i-j_i-k+1)} \\
 & \frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot
 \end{aligned}$$

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$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_i-s+1)}^{()} \sum_{j_i=l_i+n-D}^{l_{sa}+s-k-j_{sa}+1} \sum_{n_i=n}^n \sum_{n_{ik}=n_{is}+1}^{n_{ik}+j_s} \frac{(n_s + j_i - j_s - k)!}{(n_s + j_i - j_s - k)!} \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s \leq D - n + 1$

$1 \leq j_i \leq j_i - s + 1$

$j_s - s - 1 \leq j_s < n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s - j_{sa}^{ik} + j_{sa}^{ik} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$

$D + s - 1 \leq l_i \leq D + j_i + s - n - 1 \wedge$

$D \geq n < n \wedge l_s > l_s \wedge$

$j_{sa}^s = j_{sa}^l - 1 \wedge$

$s: \{j_{sa}^s, l_k, j_s\} \wedge$

$s = 2 \wedge s = s + k \wedge$

$l_k: z = 1 \Rightarrow$

$$f_z S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(l_i+n-D-s)} \sum_{j_i=l_i+n-D}^{l_i-k+1}$$

$$\begin{aligned}
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-l_k} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{i=l_k}^{i^{l-1}} \sum_{j_s=l_i+n-D-s+1}^{a-k-j_{sa}+2} \sum_{j_i=j_s+s-1}^{l_i-k+1} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-l_k} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +
\end{aligned}$$

$$\begin{aligned}
& \sum_{k=1}^{l_i} \sum_{(j_s=1)}^{l_i - l + 1} \sum_{j_i = l_i + n - D}^{l_i - l + 1} \\
& \sum_{n_i = n + lk}^n \sum_{(n_s = n - j)}^{(n_i - j_i - lk + 1)} \\
& \frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - j_s + 1)! \cdot (n_s - j_i)!} \cdot \\
& \frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s - 1)! \cdot (j_i - s)!} \cdot \\
& \frac{\binom{l_i}{k}}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \\
& \sum_{k=1}^{D + l_s + s - l_i} \sum_{(j_s = l_i + n - D - s + 1)}^{(l_{sa} - n_s - s + 2)} \sum_{j_i = j_s + s - 1}^{l_i - j_s + 1} \\
& \sum_{n_i = n + lk}^n \sum_{(n_{is} = n + lk - j_s + 1)}^{(n_i - j_s + 1)} \\
& \sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik}} \sum_{(n_s = n_{ik} + j_s + j_{sa}^{ik} - j_i - j_{sa}^{lk})}^{(n_i - j_s + 1)} \\
& \frac{(n_s + j_i - j_s - s)!}{(n_s + j_i - n - j_{sa}^s)! \cdot (n + j_{sa}^s - j_s - s)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
\end{aligned}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa}^s = j_{sa}^l - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}^l\} \wedge$$

$$s = 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z^{SDOSD} = \sum_{k=1}^{i-l-1} \sum_{j_s=2}^{(j_i-s+1)} \sum_{j_i=l_{sa}+n+s-k}^{l_{ik}+s-k-j_{sa}^k+1} \frac{(n_i-j_s) \cdot (n_{is}+j_s-j_i-k)}{(j_s-2)! \cdot (n_i-n_{is}-1)!} \cdot \frac{(n_s-n_s-1)!}{(j_i-j_s-k)! \cdot (n_{is}+j_s-n_s-j_i)!} \cdot \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \frac{(l_i-l_s-s+1)!}{(j_s+l_i-j_i-l_s)! \cdot (j_i-j_s-s+1)!} \cdot \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \sum_{k=1}^{i-l-1} \sum_{j_s=2}^{(l_{ik}-k-j_{sa}^k+2)} \sum_{j_i=l_{ik}+s-k-j_{sa}^k+2}^{l_{sa}+s-k-j_{sa}^k+1} \frac{(n_i-j_s+1) \cdot (n_{is}+j_s-j_i-k)}{(j_s-2)! \cdot (n_i-n_{is}-1)!} \cdot \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(l_i)!}{(D + j_i - n - l_i)! \cdot (j_i)!} +$$

$$\sum_{j_s=j_i-s+1}^{j_i} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{j_i+l_{sa}+n+s-1-j_{sa}+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{n_s=n-j_i+1}^{(n_i-j_i-k+1)}$$

$$\frac{(n_i - n_s - 1)!}{(j_i - j_s - 2)! \cdot (n_i - n_s - j_i + 1)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_i-s+1)}^{()} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{ik}+s-k-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{n_s=n+l_k-j_s+1}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-k)}^{()}$$

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$$\frac{(n_s + j_i - j_s - s)!}{(n_s + j_i - n - j_{sa}^s)! \cdot (n + j_{sa}^s - j_s - s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa}^s = j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s = 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$j_{sa}^{i-DOS} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(l_{sa}+n-D-j_{sa})} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{sa}+s-k-j_{sa}+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{i-1} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j_i=j_s+1}^{l_{sa}+s-k-j_{sa}+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_i+j_s-j_i-k}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_i - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - 1)!}{(j_s - 1)! \cdot (n_{is} + j_s - n - j_i)!} \cdot$$

$$\frac{(n_i - 1)!}{(n_i + j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(D - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=i}^{()} \sum_{(j_s=1)}^{l_{sa}+s-i-l-j_{sa}+1} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_s=n-j_i+1)}^{(n_i-j_i-k+1)}$$

$$\frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!} \cdot$$

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$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j_i=j_s+s-1} \sum_{n_i=n+k}^n \sum_{(n_{is}+k-j_s+1)}^{(n_i-j_s+1)} \frac{\binom{n_s+j_i-j_s-s)!}{(n_s+j_i-j_s-s)! \cdot (n_s-j_s-s)!} \cdot \frac{(l_s-k)!}{(l_s-j_s+k+1)! \cdot (j_s-2)!} \cdot \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!}$$

$$((D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + j_{sa}^{ik} > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + j_{sa}^{ik} > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa}^s = j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s = 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$fz_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i-l-1} \sum_{(j_s=2)}^{(j_i-k+1)} \sum_{j_i+l_s+n+s-D-j_{sa}}^{l_s} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_i+j_s-j_i-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{i-l-1} \sum_{(j_s=2)}^{(l_s-k+1)} \sum_{j_i=l_s+s-k+1}^{l_{sa}+s-k-j_{sa}+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - 1)!}{(j_s + l_i - j_i - 1)! \cdot (j_i - j_s + 1)!}$$

$$\frac{(n - l_i)!}{(n - j_i - 1)! \cdot (n - j_i)!}$$

$$\sum_{j_s=1}^{l_s} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{sa}+n+s-D-j_{sa}+1} \binom{l_{sa}+n+s-D-j_{sa}+1}{j_s}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_s=n-j_i+1)}^{(n_i-j_i-k+1)}$$

$$\frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_i-s+1)}^{l_s+s-k} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{sa}+n+s-D-j_{sa}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{()}^{()} (n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-\mathbb{k})$$

$$\frac{(n_s + j_i - j_s - s)!}{(n_s + j_i - n - j_{sa}^s)! \cdot (n + j_{sa}^s - j_s - s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - s)!}$$

$$\frac{(D - l_s - k)!}{(D + j_i - n - l_s)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - l_{ik} \wedge l_i + j_{sa} - s = l_s \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1)) \wedge$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1)) \wedge$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1)) \wedge$$

$$D + s - n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa}^s = j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s = 2 \wedge s = s + \mathbb{k} \wedge$$

$\mathbb{k}_z: z = 1 \Rightarrow$

$$\begin{aligned}
 f_z S_{j_s j_i}^{DOSD} = & \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(l_{sa}+n-D-j_{sa})} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{sa}+s-k-j_{sa}+1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \\
 & \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \\
 & \frac{(l_i - l_s - s + 1)!}{(l_i + l_j - l_s)! \cdot (j_i - j_s - s + 1)!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{i-1} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_s-k-1)} \sum_{j_i=j_s+s-1}^{l_{sa}+s-k-j_{sa}+1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \\
 & \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}
 \end{aligned}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=i}^{l_i} \sum_{(j_s=1)}^{l_{sa}+s-i-l-j_{sa}+1} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(j_i=k+1)}^{(j_i-k+1)}$$

$$\frac{(n_s - n_s - 1)!}{(i - 2)! \cdot (n_s - j_i + 1)!} \cdot$$

$$\frac{(n_s - n - 1)! \cdot (n - j_i)!}{(n_s - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_i - l_s - s + 1)!}{(j_i - j_s - l_s + 1)! \cdot (j_i - s)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

$$\sum_{k=1}^{D+s-n-l_i} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_s-k-1)} \sum_{j_i=j_s+s-1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-k)} \sum_{(j_s=1)}^{(j_s=1)}$$

$$\frac{(n_s + j_i - j_s - s)!}{(n_s + j_i - n - j_{sa}^s)! \cdot (n + j_{sa}^s - j_s - s)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k, j_{sa}^i\} \wedge$$

$$s > 2 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$f_z^{DOSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik})}^{(j_i-s+1)} \sum_{(l_{ik}+s-k-j_{sa}^{ik})}^{(l_{ik}+s-k-j_{sa}^{ik})} \sum_{(n_i=n+k)}^{(n_i=n+k)} \sum_{(n_{is}=n+k-j_s+1)}^{(n_{is}=n+k-j_s+1)} \sum_{(n_s=n-j_i+1)}^{(n_s=n-j_i+1)} \frac{(n_i - n_{is} - 1)!}{(i - j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - k - 1)!}{(i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - k)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik})}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{(j_i=l_{ik}+s-k-j_{sa}^{ik}+2)}^{(l_i-k+1)} \sum_{(n_i=n+k)}^{(n_i=n+k)} \sum_{(n_{is}=n+k-j_s+1)}^{(n_{is}=n+k-j_s+1)} \sum_{(n_s=n-j_i+1)}^{(n_s=n-j_i+1)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i - 1)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - 1)!}{(j_s + l_i - j_i - 1)! \cdot (j_i - j_s - 1)!} \cdot \frac{(n - l_i)!}{(n - j_i - 1)! \cdot (n - j_i)!} \cdot \sum_{k=0}^{l_s + s - n - j_s} \binom{l_s + s - n - j_s}{k} \sum_{j_i = l_i + n - D}^{j_{sa}^{ik} + 1} \sum_{n_i = n + \mathbb{k}}^n \sum_{n_{is} = n + \mathbb{k} - j_s + 1}^{(n_i - j_s + 1)} \sum_{k = n_{is} + j_{sa}^s - j_{sa}^{ik}}^{(n_s = n_{ik} + j_s + j_{sa}^{ik} - j_i - j_{sa}^s - \mathbb{k})} \frac{(n_s + j_i - j_s - s)!}{(n_s + j_i - n - j_{sa}^s)! \cdot (n + j_{sa}^s - j_s - s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s > 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$fz^D S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_i+n-D-s)} \sum_{l_i-k+1}^{l_i-k+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_i+1)} \sum_{n_s=n-j_i+1}^{n_{is}-j_i-\mathbb{k}}$$

$$\frac{(n_i - j_i - 1)!}{(j_i - 2)! \cdot (n_i - j_i - j_s + 1)!} \cdot \frac{(n_{is} - j_i - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!} \cdot \frac{(n_s - 1)!}{(n_s - j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{D-n+1} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j_i=j_s+s-1}^{l_i-k+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+1, \dots, D-s+1)}^{(l_{ik}-l_i+1, \dots, l_i+2)} \sum_{j_i=j_s+1}^{n} \sum_{n_i=n+k}^{n} \sum_{(n_{is}=n+k, \dots, n_{is}-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{is}=n+k, \dots, n_{is}-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{is}=n+k, \dots, n_{is}-j_s+1)}^{(n_i-j_s+1)} \frac{(n - j_i - j_s - s)!}{(n + j_i - n - j_{sa}^s)! \cdot (n + j_{sa}^s - j_s - s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq l_s < n \wedge l_s > D < n + 1 \wedge l_s \leq j_s \leq j_s + 1 \wedge j_s + 1 \leq j_i \leq j_s + 1 \wedge l_{ik} - j_{sa}^{ik} + j_{sa}^i > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge j_{sa}^i > n - l_i \wedge I = \mathbb{k} > 0 \wedge j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge \mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}^i\} \vee \mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}^i\} \wedge s > 2 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$\mathbb{k}_z: z = 1 \Rightarrow$

$$\begin{aligned}
 f_z S_{j_s, j_i}^{DOSD} &= \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(j_i-s+1)} \sum_{j_i=l_{ik}+n+s-D-j_{s_a}^{ik}}^{l_s+s-k} \\
 &\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+}^{n_{is}+j_s-j_i-\mathbb{k}} \\
 &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \\
 &\frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!} \cdot \\
 &\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 &\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \\
 &\frac{(l_i - l_s - s + 1)!}{(l_i + l_j - j_s - s)! \cdot (j_i - j_s - s + 1)!} \\
 &\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 &\sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)} \sum_{j_i=l_s+s-k+1}^{l_{ik}+s-k-j_{s_a}^{ik}+1} \\
 &\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}} \\
 &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \\
 &\frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!} \cdot \\
 &\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 &\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}
 \end{aligned}$$

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$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_i-s+1)}^{(\)} \sum_{j_i=l_{ik}+n+s-D-j_{sa}^{ik}}$$

$$\sum_{n_i=n+1}^n \sum_{n+1}^{(j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}} \sum_{n_{ik}+j_s^{ik}-j_i-j_{sa}^{ik}}^{(\)} \frac{(n_s + j_i - j_s - s)!}{(n_s + j_i - n - j_{sa}^{ik})! \cdot (n + j_{sa}^{ik} - j_s - s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s - s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{ik} + j_{sa}^{ik} - l_{ik} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^{ik} - 1 \wedge$$

$$S: \{j_{sa}^s, \dots, j_{sa}^i\} \vee S: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}^i\} \wedge$$

$$j_s > 2 \wedge s \leq s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z^{S_{j_s, j_i}^{DOSD}} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_{ik}+n-D-j_{sa}^{ik})} \sum_{j_i=l_{ik}+n+s-D-j_{sa}^{ik}}^{l_{ik}+s-k-j_{sa}^{ik}+1}$$

$$\begin{aligned}
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=1}^{D-n+1} \sum_{j_s=D-j_{sa}^{ik}+1}^{(l_s-k+1)} \sum_{j_i=j_s+s-1}^{l_{ik}+s-k-j_{sa}^{ik}+1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
\end{aligned}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_s-k+1)} \sum_{j_i=j_s+s-1}^{(n_i-j_s+1)} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_{sa}^s-k)} \frac{(n_s+j_i-j_s)!}{(n_s+j_i-n-j_{sa}^s) \cdot (n+j_{sa}^s-j_s)!} \cdot \frac{(l_s-k-1)!}{(l_s-k+1)! \cdot (j_s-2)!} \cdot \frac{(D-j_s-k+1)!}{(D+j_s-n-l_i)! \cdot (n-j_i)!}$$

$$\begin{aligned} & ((D \geq n < n \wedge l_s > D - n + 1 \wedge \\ & 2 \leq j_s \leq j_i - s + 1 \wedge \\ & j_s + s - 1 \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik}) \vee \\ & (D \geq n < n \wedge l_s > D - n + 1 \wedge \\ & 2 \leq j_s \leq j_i - s + 1 \wedge \\ & j_s + s - 1 \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik}) \vee \\ & ((D \geq n < n \wedge l_s > D - n + 1 \wedge \\ & 2 \leq j_s \leq j_i - s + 1 \wedge \\ & j_s + s - 1 \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik})) \wedge \\ & D \geq n < n \wedge I = \mathbb{k} > 0 \wedge \\ & j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge \end{aligned}$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}^i\} \vee \mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s > 2 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z \mathcal{S}_{j_s, j_i}^{DOSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(j_i-s+1)} \sum_{j_i=l_i+n}^{l_s+s-k} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}}$$

$$\frac{(j_s-2)! \cdot (n_i - n_{is} - j_s + 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s + j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(l_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)} \sum_{j_i=l_s+s-k+1}^{l_i-k+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_i-s+1)}^{()} \sum_{j_i=n-D}^{l_s+s-k} \sum_{n_i=n}^n \sum_{(n_{is}=n+k-j_s+1)}^{()} \sum_{(n_{ik}=n_{is}+j_{sa}-j_{sa}^{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^{ik})}^{()} \frac{(n + j_i - j_s - s)!}{(n + j_i - n - j_s - s)! \cdot (n + j_{sa}^s - j_s - s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\begin{aligned} & ((D \geq n < n \wedge l_s > D - n + 1 \wedge \\ & 2 \leq j_s \leq j_i - s + 1 \wedge \\ & j_s + s - 1 \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik}) \vee \\ & (D \geq n < n \wedge l_s > D - n + 1 \wedge \\ & 2 \leq j_s \leq j_i - s + 1 \wedge \\ & j_s + s - 1 \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik}) \vee \\ & (D \geq n < n \wedge l_s > D - n + 1 \wedge \\ & 2 \leq j_s \leq j_i - s + 1 \wedge \end{aligned}$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik}) \wedge$$

$$D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k, j_{sa}^i\} \wedge$$

$$s > 2 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$fz S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D) j_i=l_i+n-D}^{(l_s+n-D-s)} \sum_{j_i=l_i+n-D}^{1} \\ \sum_{n_i=n+k}^n \sum_{(n_i=n+k-j_s+1)}^{(n_i-j_s)} \sum_{n_s=n-j_i+1}^{(j_s-j_i-k)} \\ \frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ \frac{(n_s - 1)!}{(n_s - j_s - k - 1)! \cdot (n_{is} + j_s - n_s - j_i - k)!} \cdot \\ \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\ \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\ \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\ \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\ \sum_{k=1}^{D-n+1} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)} \sum_{j_i=j_s+s-1}^{l_i-k+1} \\ \sum_{n_i=n+k}^n \sum_{(n_i=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i - 1)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - 1)!}{(j_s + l_i - j_i - 1)! \cdot (j_i - j_s - 1)!} \cdot \frac{(n - l_i)!}{(n - l_i - 1)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{l_s + s - n - l_i} \sum_{j_s = l_i + k}^{l_s - k} \sum_{j_i = j_s + s - 1}^{n - j_s + 1} \sum_{n_i = n + \mathbb{k}}^n \sum_{n_{is} = n + \mathbb{k} - j_s + 1}^{(n_i - j_s + 1)}$$

$$\sum_{n_i = n_{is} + j_{sa}^s - j_{sa}^{ik}} \sum_{(n_s = n_{ik} + j_s + j_{sa}^{ik} - j_i - j_{sa}^s - \mathbb{k})}^{()}$$

$$\frac{(n_s + j_i - j_s - s)!}{(n_s + j_i - n - j_{sa}^s)! \cdot (n + j_{sa}^s - j_s - s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$l_i - l_s - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}^i\} \vee \mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s > 2 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(j_i-s+1)} \sum_{j_i=l_{sa}+s-k-j_{sa}}^{l_{sa}+s-k-j_{sa}} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_i-j_s+1)}^{(n_i-j+1)} \sum_{n_s=n-j_i+1}^{n_i-j_i-\mathbb{k}}$$

$$\frac{(n_i-j+1)!}{(n_i-j_s+1)!} \cdot \frac{(n_{is}-n_s-\mathbb{k}-1)!}{(j_i-j_s-1)! \cdot (n_{is}+j_s-n_s-j_i-\mathbb{k})!}$$

$$\frac{(n_s-1)!}{(n_s-j_i-n-1)! \cdot (n-j_i)!} \cdot \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!}$$

$$\frac{(l_i-l_s-s+1)!}{(j_s+l_i-j_i-l_s)! \cdot (j_i-j_s-s+1)!} \cdot \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} +$$

$$\sum_{k=1}^{D-n+1} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_{sa}-k-j_{sa}+2)} \sum_{j_i=l_{sa}+s-k-j_{sa}+2}^{l_i-k+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_s-\mathbb{k}-1)!}{(j_i-j_s-1)! \cdot (n_{is}+j_s-n_s-j_i-\mathbb{k})!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s - 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{i-1}+1)}^{(j_s=l_s+s-j_{sa}+1)} \sum_{j_i=l_i+n-k}^{(j_i=l_i+n-k)} \sum_{n_i=n+k}^n \sum_{(n_i=j_s+1)}^{(n_i=j_s+1)} \sum_{(n_i=j_s+1)}^{(n_i=j_s+1)} \sum_{(n_i=j_s+1)}^{(n_i=j_s+1)} \frac{(n - j_i - j_s - s)!}{(n_s + j_i - n - j_{sa}^s)! \cdot (n + j_{sa}^s - j_s - s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$((D > n < n \wedge l_s > n + 1) \vee (D \geq n < n \wedge l_s > D - 1 + 1) \wedge$

$2 \leq j_i < j_i - s \wedge j_s + s - 1 \leq j_i \leq n \wedge$

$j_{sa}^{ik} - 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$

$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}^i\} \wedge$

$$s > 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$fz_{j_s, j_i}^{S_{DOSD}} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_i+n-D-s)} \sum_{j_i=l_i+n-D}^{l_i-k+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_s - l_s - s + 1)!}{(j_s + 1 - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{D-n+1} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{sa}-k-j_{sa}+2)} \sum_{j_i=j_s+s-1}^{l_i-k+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{sa}-k-j_{sa}+2)} \sum_{j_i=j_s+s-}$$

$$\sum_{n_i=n}^n \sum_{=n+j_s+1}^{(j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+} \sum_{=n_{ik}+j_s}^{(j_s+1)} \frac{(n_s + j_i - j_s - \dots)}{(n_s + j_i - j_s - \dots) \cdot (n + j_{sa}^s - j_s - s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s + j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1$$

$$2 \leq j_i \leq j_i - s + 1$$

$$j_s - s - 1 \leq j_s < n \wedge$$

$$l_{ik} + j_{sa}^{ik} + 1 = l_s \wedge l_{ik} + j_{sa}^{ik} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n \wedge I = \mathbb{k} > 0$$

$$j_{sa}^{ik} = j_{sa}^i - 1, s \leq j_{sa} - 1 \wedge$$

$$S: \{j_{sa}^i, \dots, j_{sa}^i\} \vee S: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s > 2 \wedge s \leq s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(j_i-s+1)} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{ik}+s-k-j_{sa}^{ik}+1}$$

$$\begin{aligned}
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{j_s+1} \sum_{(j_s-j_s+1)}^{(l_{ik}-k-1)+2} \sum_{j_i=l_{ik}+s-k-j_{sa}^k+2}^{l_{sa}+s-k-j_{sa}+1} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -
 \end{aligned}$$

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$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_i-s+1)}^{(\quad)} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{ik}+s-k-j_{sa}^{ik}+1} \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}-j_{sa}^{ik}}^{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_{sa}^{s-k})} \sum_{(j_s=j_i-s+1)}^{(\quad)} \frac{(n_s+j_i-j_s+1)!}{(n_s+j_i-n-j_{sa}^{s-k})! \cdot (n+j_{sa}^{s-k}-s)!} \cdot \frac{(l_s-k-1)!}{(j_s-k+1)! \cdot (j_s-2)!} \cdot \frac{(D-j_s+1)!}{(D+j_s-n-l_i)! \cdot (n-j_i)!}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq j_s \leq j_i - s + 1 \wedge$

$j_s + s - 1 \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} > l_{ik} \wedge l_{sa} - j_{sa} - s = l_{sa} \wedge$

$D \geq n < n \wedge I = \dots \geq 0 \wedge$

$j_s^i = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^i - 1 \wedge$

$s: \{ \dots, \dots, l_k, j_{sa}^i \} \vee \{ j_{sa}^s, \dots, l_k, j_{sa}^i \} \wedge$

$s > 2 \wedge \dots = s + l_k \wedge$

$l_{k_z}: z = 1 \Rightarrow$

$$f_z^{S_{j_s, j_i}^{DOSD}} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_{sa}+n-D-j_{sa})} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{sa}+s-k-j_{sa}+1} \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-l_k} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{i_s} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{i_s} + j_s - n_s - j_i - \mathbb{k})!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(l_i)!}{(D + j_i - n - l_i)! \cdot (j_i)!} +$$

$$\sum_{k=1}^{D-n+1} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{(j_i=j_s+s-1)}^{(l_{sa}+s-k-j_{sa}+1)}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n-j_s+1)} \sum_{n_s=n-j_i+1}^{(n_{is}+j_s-j_i-\mathbb{k})}$$

$$\frac{(n_i - n_{i_s} - 1)!}{(j_i - j_s - 1)! \cdot (n_i - n_{i_s} - j_s + 1)!}$$

$$\frac{(n_{i_s} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{i_s} + j_s - n_s - j_i - \mathbb{k})!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{(j_i=j_s+s-1)}^{(l_{sa}+s-k-j_{sa}+1)}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n-j_s+1)}$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(k)} (n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-k)$$

$$\frac{(n_s+j_i-j_s-s)!}{(n_s+j_i-n-j_{sa}^s)! \cdot (n+j_{sa}^s-j_s-s)!}$$

$$\frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-s)!}$$

$$\frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_s) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa})) \wedge$$

$$D \geq n < n \wedge l_s = k > \wedge$$

$$j_{sa}^{ik} \leq j_{sa}^s - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k, j_{sa}^i\} \wedge$$

$$s > z \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$f_z^{S^{DOSD}} = \sum_{k=1}^{D-n+1} \sum_{(j_i-s+1)} (j_i-s+1) \sum_{(j_s=l_s+n-D)}^{l_s+s-k} j_i=l_{sa}+n+s-D-j_{sa}$$

$$\begin{aligned}
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=1}^{D-n+1} \sum_{l_s=n-D}^{l_s-k+1} \sum_{j_i=l_s+s-k+1}^{l_{sa}+s-k-j_{sa}+1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -
\end{aligned}$$

$$\begin{aligned}
& \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_i-s+1)}^{(\cdot)} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_s+s-k} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{(\cdot)} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_{sa}^s-\mathbb{k})}^{(\cdot)} \\
& \frac{(n_s+j_i-j_s-s)!}{(n_s+j_i-n-j_{sa}^s) \cdot (n+j_{sa}-s)!} \cdot \frac{(l_s-k-1)!}{(j_i-k+1)! \cdot (j_s-2)!} \\
& \frac{(D)}{(D+j_i-n-l_i)! \cdot (n-j_i)!}
\end{aligned}$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s > 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z^{S_{j_s, j_i}^{DOSD}} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_{sa}+n-D-j_{sa})} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{sa}+s-k-j_{sa}+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_s - l_s + 1)!}{(j_s + 1 - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_s-k-1)} \sum_{j_i=j_s+s-1}^{l_{sa}+s-k-j_{sa}+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

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$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_s-k-1)} \sum_{j_i=j_s+s-1}^{(j_s+1)}$$

$$\sum_{n_i=n}^n \sum_{=n+j_s+1}^{(j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+1}^{(j_s)} \sum_{=n_{ik}+j_s}^{(j_s+1)} \sum_{=n_{ik}+j_s}^{(j_s+1)} \frac{(n_s + j_i - j_s - 1)!}{(n_s + j_i - j_s - 1)! \cdot (n + j_{sa}^s - j_s - s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1$$

$$1 \leq j_s \leq j_i - s + 1$$

$$j_s - s - 1 \leq j_s < n \wedge$$

$$l_{ik} = j_{sa}^{ik} + 1 = l_s + j_{sa}^{ik} - l_{ik} \wedge$$

$$1 \leq D + j_i - n \wedge$$

$$D \geq n < n \wedge l_s > 1 \wedge$$

$$j_{sa}^{ik} = j_{sa}^{i-1} + 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, l_k, j_{sa}^i\} \wedge$$

$$s > 2 \wedge s = s + l_k \wedge$$

$$l_{kz}: z = 1 \Rightarrow$$

$$fz S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(j_i-s+1)} \sum_{j_i=s+1}^{l_{ik}+s-k-j_{sa}^{ik}+1}$$

$$\begin{aligned}
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=2}^{i^{l-1} (l_{ik} - j_{sa}^{ik} + 2)} \sum_{j_i=l_{ik}+s-k-j_{sa}^{ik}+2}^{l_i-k+1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +
\end{aligned}$$

$$\begin{aligned}
 & \sum_{k=i}^{\binom{\cdot}{l}} \sum_{j_s=1}^{l_i - i^{l+1}} \sum_{j_i=s} \\
 & \sum_{n_i=n+k}^n \sum_{(n_s=n-j)}^{(n_i-j_i-k+1)} \\
 & \frac{(n_i - n_s - k - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i - k + 1)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - j_s - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s - 1)! \cdot (j_i - s)!} \cdot \\
 & \frac{\binom{\cdot}{l_i}}{(D + j_i - n - l_i)! \cdot (n - s)!} - \\
 & \sum_{k=1}^1 \sum_{j_i=s+1}^{\binom{\cdot}{j_i-s+1}} \sum_{j_i=s+1}^{l_{ik+s-k-j_{sa}^k+1}} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-k)}^{\binom{\cdot}{}} \\
 & \frac{(n_s + j_i - j_s - s)!}{(n_s + j_i - n - j_{sa}^s)! \cdot (n + j_{sa}^s - j_s - s)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} - \\
 & \sum_{k=i}^{\binom{\cdot}{l}} \sum_{j_s=1}^{\binom{\cdot}{}} \sum_{j_i=s}
 \end{aligned}$$

GÜLDÜMBA

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{\binom{()}{n_{ik}=n_i+j_{sa}^s-j_s-j_{sa}^{ik}+1}} \sum_{n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-\mathbb{k}}$$

$$\frac{(n_s + j_i - j_s - s)!}{(n_s + j_i - n - j_{sa}^s)! \cdot (n - s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l_i \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}^i\}$$

$$s > 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$DOSD_{j_s, j_i} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j_i=j_s+s-1}^{l_i-k+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=i}^{l_i} \sum_{(j_s=1)}^{l_i - i^{l+1}} \sum_{j_i=s}$$

$$\sum_{n_i=n}^n \sum_{(j_i=k+1)}^{(j_i-k+1)}$$

$$\frac{(n_i - j_i - k - 1)!}{(j_i - k)! \cdot (n_i - j_i - k + 1)!} \cdot$$

$$\frac{(n_s - j_s - n - 1)! \cdot (n - j_i)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - j_s - s)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - s)!} -$$

$$\sum_{k=1}^{i^{l-1} (l_{ik} - k - j_{sa}^{ik} + 2)} \sum_{(j_s=2)} \sum_{j_i=j_s+s-1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s - j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik} - j_i - j_{sa}^s - k)}$$

$$\frac{(n_s + j_i - j_s - s)!}{(n_s + j_i - n - j_{sa}^s)! \cdot (n + j_{sa}^s - j_s - s)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

GÜLDENWA

$$\sum_{k=1}^n \sum_{j_s=1}^{()} \sum_{j_i=s}^{()} \frac{(n_s + j_i - j_s - s)!}{(n_s + j_i - n - j_{sa}^s) \cdot (n - s)!} \cdot \frac{(D - l_i)}{(D + s - n - 1) \cdot (n - s)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^i, j_{sa}^i\} \wedge$$

$$s > 2 \bullet s = s + \mathbb{k} /$$

$$\mathbb{k}_z, z = 1 \Rightarrow$$

$$fz^{DOSD}_{j_s, j_i} = \sum_{k=1}^{i^{l-1} (j_i - s + 1)} \sum_{(j_s=2)} l_{ik+s-k-j_{sa}^{ik}+1} \sum_{j_i=l_i+n-D} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_i-j_s+1)}^{n_{is}+j_s-j_i-\mathbb{k}} \sum_{n_s=n-j_i+1} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!}$$

$$\begin{aligned}
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{i^{l-1}} \sum_{(j_s=2)}^{(l_{ik}-k-j_{sa}^{ik}+l_i-k)} \sum_{i=l_{ik}+s-k-j_{sa}^{ik}}^{l_i-k} \\
 & \sum_{i=n+k}^{(n_i-j_s+1)} \sum_{(n_i+n+k-j_s+1)}^{n_{is}+j_s-j_i-k} \sum_{i=n-j_i+1}^{n_{is}-j_i+1} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - k - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - k)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{i^{l-1}} \sum_{(j_s=1)}^{()} \sum_{j_i=l_i+n-D}^{l_i-i^{l+1}} \\
 & \sum_{n_i=n+k}^n \sum_{(n_s=n-j_i+1)}^{(n_i-j_i-k+1)} \\
 & \frac{(n_i - n_s - k - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i - k + 1)!} \cdot
 \end{aligned}$$

GÜLDENYA

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \binom{()}{(j_s=j_i-s+1)} \sum_{j_i=l_i-n-D}^{l_{ik}+l_s-k-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n}^n \sum_{n_{is}=n+l_k-j_s+1}^n$$

$$\sum_{n_{ik}=n_{is}+l_s-j_{sa}^{ik}+1}^n \sum_{n_{is}+l_s-j_{sa}^{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^{ik}-l_k}^n$$

$$\frac{(n_s + j_i - j_s - s)!}{(n_s + j_i - n - j_s - s)! \cdot (n + j_{sa}^s - j_s - s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n + l_s \leq D - l_i + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 \leq l_s \wedge l_i - j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D - l_i < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n + l_s = l_k > 0 \wedge$$

$$j_{sa}^s - j_{sa}^{ik} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, l_k, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, l_k, j_{sa}^i\} \wedge$$

$$s > 2 \wedge s = s + l_k \wedge$$

$$l_{k_z}: z = 1 \Rightarrow$$

$$\begin{aligned}
fz S_{j_s, j_i}^{DOSD} &= \sum_{k=1}^{i^{l-1} (l_i + n - D - s)} \sum_{(j_s=2)}^{l_i - k + 1} \sum_{j_i = l_i + n - D}^{l_i - k + 1} \\
&\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{i_s} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_s = n - j_i}^{n_{i_s} + j_s - j_i - \mathbb{k}} \\
&\frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \\
&\frac{(n_{i_s} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{i_s} + j_s - n_s - j_i - \mathbb{k})!} \cdot \\
&\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
&\frac{(l_s - j_s - k + 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
&\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
&\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!} + \\
&\sum_{k=1}^{i^{l-1} (l_{ik} - k - j_{sa}^{ik} + 2)} \sum_{(j_s = l_i + n - D - s + 1)}^{l_i - k + 1} \sum_{j_i = j_s + s - 1}^{l_i - k + 1} \\
&\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{i_s} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_s = n - j_i + 1}^{n_{i_s} + j_s - j_i - \mathbb{k}} \\
&\frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \\
&\frac{(n_{i_s} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{i_s} + j_s - n_s - j_i - \mathbb{k})!} \cdot \\
&\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
&\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
&\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot
\end{aligned}$$

$$\begin{aligned}
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{l_i} \sum_{(j_s=1)}^{()} \sum_{j_i=l_i+n-D}^{l_i - i^{l+1}} \\
 & \sum_{n_i=n+k}^n \sum_{(n_i=n-j_i+1)}^{(n_i-j_i-k)} \\
 & \frac{(n_i - n - k - 1)!}{(j_i - 2)! \cdot (n_i - n_s - 1)!} \cdot \\
 & \frac{(n_s - 1)!}{(n + j_i - n_s - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_i - j_s - 1)!}{(l_i - j_s - l_s + 1)! \cdot (j_i - s)!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} - \\
 & \sum_{k=1}^{l_i+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(k-k-j_s^{ik}+2)} \sum_{j_i=j_s+s-1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_i=n+k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s - j_{sa}^{ik}}^{()} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik} - j_i - j_{sa}^{-k})} \\
 & \frac{(n_s + j_i - j_s - s)!}{(n_s + j_i - n - j_{sa}^s)! \cdot (n + j_{sa}^s - j_s - s)!} \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s > 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(j_i-s+1)} \sum_{l_s=s-k}^{l_s+s-k} \sum_{n_i=n+\mathbb{k}}^{n_i} \sum_{n_{is}=n+\mathbb{k}-j_s+1}^{n_{is}+j_s-j_i-\mathbb{k}} \sum_{n_s=n-j_i+1}^{n_s} \frac{(n_i - n_{is} - 1)!}{(i - j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(l_s-k+1)} \sum_{j_i=l_s+s-k+1}^{l_{ik}+s-k-j_{sa}^{ik}+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(n - l_i)!}{(n - j_i - n + l_i)! \cdot (n - j_i)!}$$

$$\sum_{i=1}^n \sum_{j_s=1}^{n-l_i} \sum_{j_i=l_{ik}+n+s-D-j_s a}^{n-l_{ik}+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_s=n-j_i+1)}^{(n_i-j_i-\mathbb{k}+1)}$$

$$\frac{(n_i - n_s - \mathbb{k} - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i - \mathbb{k} + 1)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_i-s+1)}^{()} \sum_{j_i=l_{ik}+n+s-D-j_s a}^{l_s+s-k}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-\mathbb{k})} \frac{(n_s+j_i-j_s-s)!}{(n_s+j_i-n-j_{sa}^s)! \cdot (n+j_{sa}^s-j_s-s)!} \cdot \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-s)!} \cdot \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s > 2 \wedge s = s + 1 \wedge$$

$$\mathbb{k}: z = 1 =$$

$$fz_{j_s, j_i}^{DOSD} = \sum_{k=1}^{l-1} \sum_{(j_s=2)}^{(l_{ik}+n-D-j_{sa}^{ik})} \sum_{j_i=l_{ik}+n+s-D-j_{sa}^{ik}}^{l_{ik}+s-k-j_{sa}^{ik}+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\begin{aligned}
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{i-1} \sum_{(j_s=l_{ik}+n-D-j_i^{ik-1})}^{(l_s-k+1)} \sum_{j_i=l_{ik}+n-k-j_s^{ik}+1}^{l_{ik}+n-k-j_s^{ik}+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_i^{ik-1})}^{(-j_s+1)} \sum_{n_s=n-j_i+1}^{(j_i-l_k)} \\
 & \frac{(n_i - n_s - k - 1)!}{(j_s - 1)! \cdot (n_i - n_s - j_s + 1)!} \cdot \\
 & \frac{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - k)!}{(n_s - 1)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=i}^l \sum_{(j_s=1)}^{()} \sum_{j_i=l_{ik}+n+s-D-j_s^{ik}}^{l_{ik}+s-i-l-j_s^{ik}+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_s=n-j_i+1)}^{(n_i-j_i-k+1)} \\
 & \frac{(n_i - n_s - k - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i - k + 1)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot
 \end{aligned}$$

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$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_s-k+1)} \sum_{j_i=j_s+s-1}^{(j_s+1)}$$

$$\sum_{n_i=n+l_s-j_s+1}^n \sum_{n+l_s-j_s+1}^{(j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_i-j_{sa}^{ik}} \sum_{(j_s+1)}^{(j_s+1)} \frac{(n_s + j_i - j_s - s)!}{(n_s + j_i - j_{sa}^s) \cdot (n + j_{sa}^s - j_s - s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s \leq D - n + 1$$

$$1 \leq j_s \leq j_i - s + 1$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s \leq j_i \leq n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$l_i \leq D + s - n) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^i, \mathbb{k}, j_{sa}^i\}$$

$$s > 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(j_i-s+1)} \sum_{j_i=s+1}^{l_s+s-k}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{i-1} \sum_{j=2}^{l_s-k+1} \sum_{j_i=l_s-k+1}^{i-k+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{n_s=n-j_i+1}^{n-j_s+1} \sum_{n_s=n-j_i+1}^{j_i-l_k}$$

$$\frac{(n_i - n_s - l_k - 1)!}{(j_s - 1)! \cdot (n_i - n_s - j_s + 1)!}$$

$$\frac{(n_s - n_s - l_k - 1)!}{(j_i - j_s - 1)! \cdot (n_i + j_s - n_s - j_i - l_k)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=i}^{\binom{\cdot}{l}} \sum_{j_s=1}^{l_i-i+1} \sum_{j_i=s}$$

$$\sum_{n_i=n+l_k}^n \sum_{n_s=n-j_i+1}^{(n_i-j_i-l_k+1)}$$

$$\frac{(n_i - n_s - l_k - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i - l_k + 1)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

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$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$\sum_{k=1}^{i-1} \sum_{(j_s=j_i-s+1)}^{()} \sum_{j_i=s+1}^{l_s+s-k}$$

$$\sum_{n_i=n+1}^n \sum_{(j_s+1)}^{(n+j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}+j_s+1}^{(n_{ik}=n_i+j_{sa}+j_s-j_i-j_{sa}^{ik})} \frac{(n_s + j_i - j_s - s)!}{(n_s + j_i - n - j_{sa}^s) \cdot (n + j_{sa}^s - j_s - s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=i}^{()} \sum_{(j_s=1)} \sum_{j_i=s}$$

$$\sum_{n_i=n+1}^{()} \sum_{(n_{ik}=n_i+j_{sa}^s-j_s-j_{sa}^{ik}+1)}^{()} \sum_{n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^{ik}}$$

$$\frac{(n_s + j_i - j_s - s)!}{(n_s + j_i - n - j_{sa}^s)! \cdot (n - s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$(l_i \leq D + s - n) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{lk} = j_{sa}^i - 1 \wedge j_{sa}^{lk} \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^{lk}, \dots, \mathbb{k}, j_{sa}^i\} \vee s: \{j_{sa}^{lk}, \dots, j_{sa}^i, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s > 2 \wedge s_{sa}^{lk} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: \dots \Rightarrow$$

$$fz S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(l_s-k+1)} \sum_{j_i=j_s+s-1}^{l_i-k+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - s + 1)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(n - l_i)!}{(n - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{i+1} \sum_{(j_s=1)} \sum_{j_i=s}^{i+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_s=n-j_i+1)}^{(n_i-j_i-\mathbb{k}+1)}$$

$$\frac{(n_i - n_s - \mathbb{k} - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i - \mathbb{k} + 1)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$\sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(l_s-k+1)} \sum_{j_i=j_s+s-1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^{lk})} \frac{(n_s + j_i - j_s - s)!}{(n_s + j_i - n - j_{sa}^s)! \cdot (n + j_{sa}^s - j_s - s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - s)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \sum_{(j_s=1)} \sum_{j_i=s} \sum_{(n_i=n+l_k)} \sum_{(n_{ik}=n_i+j_{sa}^s-j_{sa}^{ik}+1)} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^{lk})} \frac{(n_s + j_i - j_s - s)!}{(n_s + j_i - n - j_{sa}^s)! \cdot (n - s)!} \cdot \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$\begin{aligned} & ((D \geq n < n \wedge l_s \leq D - n + 1 \wedge \\ & 1 \leq j_s \leq j_i - s + 1 \wedge \\ & j_s + s - 1 \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge \\ & D + s - n < l_i \leq D + j_{sa}^{ik} - n - 1) \vee \\ & ((D \geq n < n \wedge l_s \leq D - n + 1 \wedge \\ & 1 \leq j_s \leq j_i - s + 1 \wedge \\ & j_s + s - 1 \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge \\ & D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1) \vee \\ & ((D \geq n < n \wedge l_s \leq D - n + 1 \wedge \\ & 1 \leq j_s \leq j_i - s + 1 \wedge \end{aligned}$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k, j_{sa}^i\} \wedge$$

$$s > 2 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$fz S_{j_s, j_i}^{D, D, D} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(j_i-s+1)} \sum_{j_i=l_i+n-D}^{l_s+s-k}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - k - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - k)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{i^{l-1} (l_s - k + 1)} \sum_{(j_s=2)}^{l_i - k + 1} \sum_{j_i = l_s + s - k + 1}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_s = n - j_i + 1}^{n_{is} + j_s - 1}$$

$$\frac{(n_i - n_{is} - k + 1)!}{(j_s - 2)! \cdot (n_i - n_s - j_i - k + 1)!} \cdot$$

$$\frac{(n_{is} - n_s - k + 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - k + 1)!} \cdot$$

$$\frac{(n_s - j_i - n - 1)!}{(n_s - j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_i - k - 1)!}{(l_i - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s - l_s - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{()} \sum_{(j_s=1)}^{l_i - i^{l+1}}$$

$$\sum_{n_i = n + k}^n \sum_{(n_s = n - j_i + 1)}$$

$$\frac{(n_i - n_s - k - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i - k + 1)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

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$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_i-s+1)}^{()} \sum_{j_i=l_i+n-D}^{l_s+s-k} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{()} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_{sa}^s-k)}^{()} \frac{(n_s+j_i-j_s-s)!}{(n_s+j_i-n-j_{sa}^s) \cdot (n+j_{sa}^s-s)!} \cdot \frac{(l_s-k-1)!}{(j_i-k+1)! \cdot (j_s-2)!} \cdot \frac{(D)}{(D+j_i-n-l_i)! \cdot (n-j_i)!}$$

$$((D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$((D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D + s - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + s - n < l_{ik} \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s > 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$fz S_{j_s, j_i}^{D, D} = \sum_{i=1}^{i=l_i+n-D-s} \sum_{(j_s=2)}^{j_i-k+1} \sum_{j_i=l_i+n-D}^{n} \sum_{n_i=n+\mathbb{k}}^{n_i-j_s+1} \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{n_{is}+j_s-j_i-\mathbb{k}} \sum_{n_s=n-j_i+1}^{(n_i - n_{is} - 1)!} \cdot \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{i-1} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)} \sum_{j_i=j_s+s-1}^{l_i-k+1}$$

$$\begin{aligned}
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k} - 1)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - \mathbb{k} - 1)!}{(l_s - j_s - \mathbb{k} + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - l_s - s + 1)! \cdot (j_i - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{()} \sum_{(j_s=1)}^{l_i - i^{l+1}} \sum_{j_i=l_i+n-D}^{l_i - i^{l+1}} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_s=n-j_i+1)}^{(n_i-j_i-\mathbb{k}+1)} \\
 & \frac{(n_i - n_s - \mathbb{k} - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i - \mathbb{k} + 1)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} - \\
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)} \sum_{j_i=j_s+s-1}
 \end{aligned}$$

GÜLDÜNYA

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s)}^{(\quad)}$$

$$\frac{(n_s + j_i - j_s - s)!}{(n_s + j_i - n - j_{sa}^s)! \cdot (n + j_s - j_s - s)!}$$

$$\frac{(l_s - k - 1)! \cdot (l_s - 2)!}{(l_s - j_s - 1)! \cdot (l_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - l_i)! \cdot (n - j_s - 1)!}$$

$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_i - s + 1 \wedge$

$j_s + s - 1 \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_{sa} + j_{sa} - s > 0 \wedge$

$D + s - n < l_i \leq D + l_s + j_s - n - 1 \wedge$

$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_s^i \leq j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}, j_i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}^i\}$

$s > 2 \wedge s = s + 1$

$\mathbb{k}_z: z = 1 \Rightarrow$

$$f_z^{DOSD}_{j_s, j_i} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(j_i-s+1)} \sum_{j_i=l_i+n-D}^{l_{sa}+s-k-j_{sa}+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - k - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - k)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 1)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(l_i)!}{(D + j_i - n - l_i)! \cdot (j_i)!} +$$

$$\sum_{k=1}^{i-1} \sum_{s=2}^{(l_{sa}-k-j_{sa}+2)} \sum_{n_i=n+l_k}^n \sum_{n_s=n+k-j_s+1}^{n_{is}+j_s-j_i-k} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k}$$

$$\frac{(n_i - n_{is} - 1)!}{(i - 1)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - k - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - k)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^i \sum_{(j_s=1)}^{()} \sum_{j_i=l_i+n-D}^{l_i-i+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_s=n-j_i+1)}^{(n_i-j_i-k+1)}$$

GÜLDÜSİMA

$$\frac{(n_i - n_s - \mathbb{k} - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i - \mathbb{k} + 1)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \binom{D+l_s+s-n-l_i}{(j_s=j_i+k+1)} \sum_{j_i=l_i+n-k}^{l_{sa}+s-j_{sa}+1} \binom{l_{sa}+s-j_{sa}+1}{j_i=l_i+n-k}$$

$$\sum_{n_i=n+\mathbb{k}}^n \binom{n}{n_i=n+\mathbb{k}} \sum_{j_s=j_i+k}^{(n_i-j_s+1)} \binom{(n_i-j_s+1)}{j_s=j_i+k}$$

$$\sum_{n_i=n+\mathbb{k}} \binom{D+l_s+s-n-l_i}{n_i=n+\mathbb{k}} \sum_{j_s=j_i+k}^{(n_i-j_s+1)} \binom{(n_i-j_s+1)}{j_s=j_i+k}$$

$$\frac{(n_i - j_i - j_s - s)!}{(n_i + j_i - n - j_{sa}^s)! \cdot (n + j_{sa}^s - j_s - s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - 1 \leq l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s > 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(l_i+n-D-s)} \sum_{j_i=l_i+n-D}^{l_i-k+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{i-1} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{sa}-k-j_{sa}+2)} \sum_{j_i=j_s+s-1}^{l_i-k+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

GÜLDÜMÜYA

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{l_i} \sum_{(j_s=1)}^{l_i - i + 1} \sum_{j_i=l_i+n-l_s}^{l_i - i + 1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(j_i=l_i+n-l_s)}^{(j_i-l_k+1)}$$

$$\frac{(n_i - l_s - l_k - 1)!}{(j_i - l_s - 2)! \cdot (n_i - l_s - j_i - l_k + 1)!} \cdot$$

$$\frac{(n_s - l_s - n - 1)!}{(n - j_i)!} \cdot$$

$$\frac{(l_i - l_s - s + 1)!}{(j_i - j_i - l_s + 1)! \cdot (j_i - s)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

$$\sum_{k=1}^{+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{sa}-k-j_{sa}+2)} \sum_{j_i=j_s+s-1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-l_k)}$$

$$\frac{(n_s + j_i - j_s - s)!}{(n_s + j_i - n - j_{sa}^s)! \cdot (n + j_{sa}^s - j_s - s)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

GÜLDENWA

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k, j_{sa}^i\} \wedge$$

$$s > 2 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$f_z^{SD} = \sum_{k=1}^n \sum_{j_s=1}^{j_i-s+1} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{ik}+l_i-k-j_{sa}^{ik}+1} \sum_{n_i=n+k}^n \sum_{n_s=n+k-j_s+1}^{(n_i-j_s)} \sum_{n_s=n-j_i+1}^{n_i+j_s-j_i-k} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - k - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - k)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{i-l-1} \sum_{(j_s=2)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j_i=l_{ik}+s-k-j_{sa}^{ik}+2}^{l_{sa}+s-k-j_{sa}+1}$$

$$\begin{aligned}
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - 1)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - \mathbb{k} - 1)!}{(l_s - j_s - \mathbb{k} + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - l_s - i - s + 1)! \cdot (i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{i=(j_s=1)}^{(\quad)} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{sa}+s-i-l-j_{sa}+1} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_s=n-j_i+1)}^{(n_i-j_i-\mathbb{k}+1)} \\
 & \frac{(n_i - n_s - \mathbb{k} - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i - \mathbb{k} + 1)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} - \\
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_i-s+1)}^{(\quad)} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{ik}+s-k-j_{sa}^{ik}+1}
 \end{aligned}$$

GÜLDENWA

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s)}^{(\quad)}$$

$$\frac{(n_s + j_i - j_s - s)!}{(n_s + j_i - n - j_{sa}^s)! \cdot (n + j_{sa}^s - j_s - s)!}$$

$$\frac{(l_s - k - 1)! \cdot (l_s - 2)!}{(l_s - j_s - 1)! \cdot (l_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_{sa} + j_{sa} - s = \dots \wedge$$

$$D + s - n < l_i \leq D + l_s + \dots - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^i \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}^i\}$$

$$s > 2 \wedge s = s + 1$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(l_{sa}+n-D-j_{sa})} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{sa}+s-k-j_{sa}+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(l_i)!}{(D + j_i - n - l_i)! \cdot (j_i)!} +$$

$$\sum_{k=1}^{i-1} \sum_{j_s=l_{sa}-D-j_{sa}}^{l_{ik}-k-j_{sa}^{ik}+2} \sum_{n_s=n-j_i+1}^{l_{sa}+s-k-j_{sa}+1} \frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!}$$

$$\frac{(n_i - n_{is} - 1)!}{(i - 1)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{i-1} \sum_{j_s=1}^{l_{sa}+s-i-l-j_{sa}+1} \sum_{n_s=n-j_i+1}^{l_{sa}+s-i-l-j_{sa}+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{n_s=n-j_i+1}^{(n_i-j_i-\mathbb{k}+1)}$$

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$$\frac{(n_i - n_s - k - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i - k + 1)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \binom{l_{ik}-k-1}{j_s=l_{sa}+n-l_i-k} \binom{l_{ik}-k-1}{j_i=j_s+1}$$

$$\sum_{n_i=n+k}^n \binom{n-i-j_s+1}{n_i} \binom{n-i-j_s+1}{j_s+1}$$

$$\sum_{n_i=n+k}^n \binom{n-i-j_s+1}{n_i} \binom{n-i-j_s+1}{j_s+1}$$

$$\frac{(n - j_i - j_s - s)!}{(n + j_i - n - j_{sa}^s)! \cdot (n + j_{sa}^s - j_s - s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + j_{sa}^{ik} = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$l_{ik} - j_{sa}^{ik} + j_{sa}^{ik} < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}^i\}$$

$$s > 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$c_z^{SD} = \sum_{(j_s=2)}^{i^{l-1} (s+1)} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_s+s-k} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\begin{aligned}
& \sum_{k=1}^{i^{l-1} (l_s - k + 1)} \sum_{(j_s=2)}^{l_{sa} + s - k - j_{sa} + 1} \sum_{j_i = l_s + s - k + 1} \\
& \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_s = n - j_i}^{n_{is} + j_s - j_i - \mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - \mathbb{k})!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - l_i - k + 1)!}{(l_s - l_i - s + 1)!} \cdot \\
& \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=i^l}^{()} \sum_{(j_s=1)}^{l_{sa} + s - i^l - j_{sa} + 1} \sum_{j_i = l_{sa} + n + s - D - j_{sa}} \\
& \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_s = n - j_i + 1)}^{(n_i - j_i - \mathbb{k} + 1)} \\
& \frac{(n_i - n_s - \mathbb{k} - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i - \mathbb{k} + 1)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -
\end{aligned}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_i-s+1)}^{(\quad)} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_s+s-k} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{(\quad)} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_{sa}^s-k)}^{(\quad)} \frac{(n_s+j_i-j_s-s)!}{(n_s+j_i-n-j_{sa}^s) \cdot (n+j_{sa}-s)!} \cdot \frac{(l_s-k-1)!}{(j_i-k+1)! \cdot (j_s-2)!} \cdot \frac{(D)}{(D+j_i-n-l_i)! \cdot (n-j_i)!}$$

$((D \geq n < n \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_i - s + 1 \wedge$

$j_s + s - 1 \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$D + s - n < l_i \leq (D + l_s + s - n - 1) \vee$

$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_i - s + 1 \wedge$

$j_s + s - 1 \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$D + s - n < l_i \leq (D + l_s + s - n - 1) \vee$

$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_i - s + 1 \wedge$

$j_s + s - 1 \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$D + s - n < l_i \leq (D + l_s + s - n - 1)) \wedge$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s > 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(l_{sa}+n-D-j_{sa})} \frac{l_{sa}+s-k-j_{sa}+1}{(j_s-2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_i - n_{is} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!} \cdot \frac{(n_s - 1)!}{(j_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{i-1} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_s-k-1)} \sum_{j_i=j_s+s-1}^{l_{sa}+s-k-j_{sa}+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!}$$

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$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s - 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{(j_s - l_s - i) - (n_s - a + 1)} \sum_{j_s = l_{sa} + n - D - j_{sa} + 1}^{(j_s - l_s - i) - (n_s - a + 1)}$$

$$\sum_{n_i = n + lk}^n \sum_{(n_i - l_s - j_i + 1)}$$

$$\frac{(n_i - n_s - lk - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i - lk + 1)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_s-k-1)} \sum_{j_i=j_s+s-1}$$

$$\sum_{n_i=n+lk}^n \sum_{(n_i=n+lk-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-lk)}$$

$$\frac{(n_s + j_i - j_s - s)!}{(n_s + j_i - n - j_{sa}^s)! \cdot (n + j_{sa}^s - j_s - s)!}$$

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$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

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$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} = 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}^i\} \wedge$$

$$s \geq 2 \wedge s = s \Rightarrow$$

$$fz S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik})}^{(j_i-s+1)} \sum_{(l_{ik}+s-k-j_{sa}^{ik})}^{(l_{ik}+s-k-j_{sa}^{ik})} \sum_{(n_i=n-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_s=n-j_i+1)}^{(n_{is}+j_s-j_i)}$$

$$\frac{(n_i - n_{is} - 1)!}{(i - l_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{D-n+1} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik})}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{(j_i=l_{ik}+s-k-j_{sa}^{ik}+2)}^{(l_i-k+1)}$$

$$\sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{(n_{is}+j_s-j_i)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - 1)!}{(j_s + l_i - j_i - 1)! \cdot (j_i - j_s - 1)!} \cdot \frac{(n - l_i)!}{(n - j_i - 1)! \cdot (n - j_i)!} \cdot \sum_{k=0}^{l_s + s - n - j_i} \binom{l_s + s - n - j_i}{k} \sum_{j_i = l_i + n - D}^{j_{sa}^{ik} + 1} \sum_{n_i = n + \mathbb{k}}^n \sum_{n_{is} = n + \mathbb{k} - j_s + 1}^{(n_i - j_s + 1)} \sum_{\mathbb{k} = n_{is} + j_{sa}^s - j_{sa}^{ik}}^{(n_s - n_{ik} + j_s + j_{sa}^{ik} - j_i - j_{sa}^s - \mathbb{k})} \frac{(n_s - j_{sa}^s)!}{(n_s + j_i - n - j_{sa}^s)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} = 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}^i\} \wedge$$

$$s \geq 2 \wedge s = s \Rightarrow$$

$$fz_{j_s, j_i}^{DOSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_i+n-D-s)} \sum_{j_i=l_i+n}^{l_i-k+1} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{D-n+1} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j_i=j_s+s-1}^{l_i-k+1} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j_i=l_i+s-1}^{(j_i+l_i-n)} \sum_{n_i=n-l_i}^n \sum_{n_{is}=n+l_k-j_s+1}^{(n-l_i)} \sum_{n_{ik}=n_{is}-j_{sa}^{ik}}^{(n_{is}-j_{sa}^{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-l_k)} \frac{(n_s - j_{sa}^s)!}{(n_s + j_{sa}^s - n - j_{sa}^s)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n_{ik} > D - l_i + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 \leq l_s \wedge l_{ik} - j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D \geq l_i \wedge I = k = 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^i \wedge$$

$$s \in \{j_{sa}^s, j_{sa}^i\} \wedge$$

$$s \geq 2 \wedge s = s \Rightarrow$$

$$f_{z_{j_s, j_i}}^{S_{DOSD}} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(j_i-s+1)} \sum_{j_i=l_{ik}+n+s-D-j_{sa}^{ik}}^{l_s+s-k}$$

$$\begin{aligned}
& \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=1}^{D-n+1} \sum_{s=l_s+n-D}^{l_s-k+1} \sum_{j_i=l_s+s-k+1}^{l_{ik}+s-k-j_{is}^{ik}+1} \\
& \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
\end{aligned}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_i-s+1)}^{(\quad)} \sum_{j_i=l_{ik}+n+s-D-j_{sa}^{ik}}^{l_s+s-k} \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}}^{(\quad)} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_{sa}^{ik})}^{(\quad)} \frac{(n_s+j_s)!}{(n_s+j_s-n+j_{sa}^s)! \cdot (n-j_i)!} \cdot \frac{(l_s+k-1)!}{(l_s+k-1-k+1)! \cdot (j_s-2)!} \cdot \frac{(D-n+1)!}{(D+j_s-n-l_i)! \cdot (n-j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - j_{sa}^{ik} = l_{ik} \wedge$$

$$D \geq n < n \wedge I = 0 \wedge$$

$$j_s \leq j_{sa}^i - 1$$

$$s: \{j_{sa}^i\} \wedge$$

$$s \geq 2 \wedge s = s \Rightarrow$$

$$fz_{j_s, j_i}^{DOSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_{ik}+n-D-j_{sa}^{ik})} \sum_{j_i=l_{ik}+n+s-D-j_{sa}^{ik}}^{l_{ik}+s-k-j_{sa}^{ik}+1} \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(l_i)!}{(D + j_i - n - l_i)! \cdot (j_i)!} +$$

$$\sum_{k=1}^{D-n+1} \sum_{(j_s=l_{ik}+n-D-j_s a)}^{(l_s-k+1)} \sum_{(j_i=j_s+s-1)}^{l_{ik}+s-k-j_s a} \sum_{n_i=n-j_s+1}^n \sum_{n_{is}=n-j_s+1}^{n_i-j_s+1} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_i - j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_{ik}+n-D-j_s a)}^{(l_s-k+1)} \sum_{j_i=j_s+s-1} \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{()} (n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-k) \frac{(n_s-j_{sa}^s)!}{(n_s+j_i-n-j_{sa}^s)! \cdot (n-j_i)!} \cdot \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-l_i)!} \cdot \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!}$$

$$\begin{aligned} & ((D \geq n < n \wedge l_s > D - n + 1 \wedge \\ & 2 \leq j_s \leq j_i - s + 1 \wedge \\ & j_s + s - 1 \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik}) \vee \\ & ((D \geq n < n \wedge l_s > D - n + 1 \wedge \\ & 2 \leq j_s \leq j_i - s + 1 \wedge \\ & j_s + s - 1 \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik}) \vee \\ & ((D \geq n < n \wedge l_s > D - n + 1 \wedge \\ & 2 \leq j_s \leq j_i - s + 1 \wedge \\ & j_s + s - 1 \leq j_i \leq n \wedge \\ & (l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik})) \wedge \\ & D \geq n < n \wedge l_s = k = 1 \wedge \\ & j_{sa}^s = j_{sa}^{ik} + 1 \wedge \\ & s: \{j_{sa}^s, j_{sa}^{ik}\} \\ & s \geq 2 \wedge s = s \Rightarrow \end{aligned}$$

$$fz_{j_s, j_i}^{DOSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(j_i-s+1)} \sum_{j_i=l_i+n-D}^{l_s+s-k}$$

$$\begin{aligned}
& \sum_{n_i=n}^n \sum_{n_{is}=n-j_s+1}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=0}^{D-n} \sum_{j_s=l_s+n-D}^{(l_s-k+1)} \sum_{j_i=l_s+s-k+1}^{l_i-k+1} \\
& \sum_{n_i=n}^n \sum_{n_{is}=n-j_s+1}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -
\end{aligned}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \binom{()}{(j_s=j_i-s+1)} \sum_{j_i=l_i+n-D}^{l_s+s-k} \sum_{n_i=n+k}^n \sum_{(n_i=n+k-j_s+1)}^{(n_i-j_s+1)} \frac{(n_s+j_{sa}^s)!}{(n_s+j_{sa}^s)!(n-j_{sa}^s)!} \cdot \frac{(l_s+k-1)!}{(j_i-k+1)! \cdot (j_s-2)!} \frac{(D)}{(D+j_{sa}^s-n-l_i)! \cdot (n-j_i)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik})) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} = 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}^i\} \wedge$$

$$s \geq 2 \wedge s = s \Rightarrow$$

$$\begin{aligned}
 f_z S_{j_s, j_i}^{DOSD} &= \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_i+n-D-s)} \sum_{j_i=l_i+n-D}^{l_i-k+1} \\
 &\sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i}^{n_{is}+j_s-j_i} \\
 &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \\
 &\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \\
 &\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 &\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \\
 &\frac{(l_i - l_s - s + 1)!}{(l_i + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \\
 &\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 &\sum_{k=1}^{D-n+1} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)} \sum_{j_i=j_s+s-1}^{l_i-k+1} \\
 &\sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \\
 &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \\
 &\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \\
 &\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 &\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}
 \end{aligned}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)} \sum_{j_i=j_s+s-k}^{(j_s+1)}$$

$$\sum_{n_i=n}^n \sum_{(n_i=j_s+1)}^{(n_i=j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+1}^{(n_{ik}=n_{is}+1)} \sum_{(n_{ik}=n_{is}+1)}^{(n_{ik}=n_{is}+1)}$$

$$\frac{(n_s - j_s)!}{(n_s + j_i - n - j_{sa}^s)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1$$

$$2 \leq j_i \leq j_i - s + 1$$

$$j_s - s - 1 \leq j_s < n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge j_{sa}^{ik} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n \wedge I = \mathbb{k} =$$

$$j_{sa}^s \leq j_{sa}^i - 1$$

$$s: (j_{sa}, j_{sa}^s)$$

$$s \geq 2 \wedge s < s \Rightarrow$$

$$f_z^{S_{j_s, j_i}^{DOSD}} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(j_i-s+1)} \sum_{j_i=l_i+n-D}^{l_{sa}+s-k-j_{sa}+1}$$

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$$\begin{aligned}
 & \sum_{n_i=n}^n \sum_{n_{is}=n-j_s+1}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{l_s+1} \sum_{j_s=l_s+1}^{(l_{sa}-k-1)+2} \sum_{j_i=l_{sa}+s-k-j_{sa}+2}^{l_i-k+1} \\
 & \sum_{n_i=n}^n \sum_{n_{is}=n-j_s+1}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -
 \end{aligned}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_i-s+1)}^{()} \sum_{j_i=l_i+n-D}^{l_{sa}+s-k-j_{sa}+1} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}}^{()} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_{sa}^{ik})}^{()} \frac{(n_s+j_{sa}^{is})!}{(n_s+j_{sa}^{is}-n+j_{sa}^{is})! \cdot (j_i)!} \cdot \frac{(l_s+k-1)!}{(j_i-k+1)! \cdot (j_s-2)!} \cdot \frac{(D)}{(D+j_i-n-l_i)! \cdot (n-j_i)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s + l_{sa} + j_{sa}^{ik} - j_{sa}^{ik} \wedge l_{ik} \wedge l_{sa} + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge n = k = 0$$

$$j_{sa}^s < j_{sa}^i - 1 \wedge$$

$$s; \{j_{sa}^s, j_{sa}^i\} \wedge$$

$$s \geq 2 \wedge s = j_s$$

$$fz_{j_s, j_i}^{DOSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_i+n-D-s)} \sum_{j_i=l_i+n-D}^{l_i-k+1} \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!} \cdot$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot$$

$$\frac{(l_i)!}{(D + j_i - n - l_i)! \cdot (j_i)!} +$$

$$\sum_{k=1}^{D-n+1} \sum_{j_s=l_i}^{(l_{sa}-k-j_{sa}+2)} \sum_{j_i=j_s+s-1}^{l_i-k+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{n_{is}=n+l_k-j_s+1}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - k)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{sa}-k-j_{sa}+2)} \sum_{j_i=j_s+s-1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-k)}^{()}$$

$$\frac{(n_s - j_{sa}^s)!}{(n_s + j_i - n - j_{sa}^s)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!}$$

$$\frac{(D - l_s)!}{(D + j_i - n - l_s)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa}^{ik} \wedge l_i + j_s - s = l_s \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} = 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}^i\} \wedge$$

$$s \geq 2 \wedge s = s \Rightarrow$$

$$fz^S_{j_s, j_i}^{DOS} \sum_{k=1}^{D-1} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(j_i-s+1)} \sum_{(j_i=l_{sa}+n+s-D-j_{sa}^{ik}+1)}^{l_{ik}+s-k-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{D-n+1} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j_i=l_{ik}+s-k-j_{sa}^{ik}+1}^{l_{sa}+s-k-j_{sa}+1}$$

$$\sum_{n_i=n}^n \sum_{(n_{is}=n-j_s)}^{(n_i-j_s+1)} \sum_{(n_{is}-j_s+1)}^{(s+j_s-j_i)}$$

$$\frac{(n_i - n_{is} - 1)!}{(i - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - j_s - 1)!}{(n_{is} + j_s - s - j_i)!}$$

$$\frac{(n_i + j_i - n - 1)! \cdot (n - j_i)!}{(n_i - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_s - k - 1)!}{(j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_i-s+1)}^{()} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{ik}+s-k-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{()} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-k)}^{()}$$

$$\frac{(n_s - j_{sa}^s)!}{(n_s + j_i - n - j_{sa}^s)! \cdot (n - j_i)!}$$

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$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} = 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}^i\} \wedge$$

$$s \geq 2 \wedge s = s \Rightarrow$$

$$fz_{j_s, j_i}^{SDOSD} = \sum_{k=0}^{D-n+1} \sum_{l_i=l_{ik}+n-D-k}^{(l_{sa}+D-j_{sa})} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_i+s-k-j_{sa}+1} \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\begin{aligned}
 & \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j_i=j_s+s-1}^{l_{sa}+s-k-j_{sa}+1} \\
 & \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i}^{n_{is}+j_s-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - j_s - k + 1)!}{(l_s - j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_s - l_s)! \cdot (l_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \\
 & \sum_{k=1}^{D+s-n-l_i} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j_i=j_s+s-1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-k)}^{()} \\
 & \frac{(n_s - j_{sa}^s)!}{(n_s + j_i - n - j_{sa}^s)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

$((D \geq n < n \wedge l_s > D - n + 1 \wedge$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \wedge$$

$$D \geq n < n \wedge l = k = 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}^i\} \wedge$$

$$s \geq 2 \wedge s = s \Rightarrow$$

$$fz_{ik} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(j_i-s+1)} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_s+s-k} \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)} \sum_{j_i=l_s+s-k+1}^{l_{sa}+s-k-j_{sa}+1}$$

$$\sum_{n_i=n}^n \sum_{(n_{is}=n-k+1)}^{(n_i-j_s+1)} \sum_{j_{i+1}}^{(n_s+j_s-j_i)}$$

$$\frac{(n_s - n_{is} - 1)!}{(j_s - 2)! \cdot (n_s - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s + j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_i-s+1)}^{()} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_s+s-k}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^{ik})}^{()}$$

$$\frac{(n_s - j_{sa}^s)!}{(n_s + j_i - n - j_{sa}^s)! \cdot (n - j_i)!} \cdot$$

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$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \wedge$$

$$D \geq n < n \wedge l = 0 \wedge$$

$$j_s \leq j_{sa}^i - 1$$

$$s: \{j_{sa}^i\} \wedge$$

$$j_s \geq 2 \wedge j_s = s \Rightarrow$$

$$fz_{j_s, j_i}^{DOSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_{sa}+n-D-j_{sa})} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{sa}+s-k-j_{sa}+1} \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 1)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} + \frac{(l_i)!}{(D + j_i - n - l_i)! \cdot (j_i)!}$$

$$\sum_{k=1}^{D-n+1} \sum_{(j_s=l_{sa}+n-D-j_{sa})}^{(l_s-k-1)} \sum_{(j_i=j_s+s-1)}^{(l_{sa}+s-k-j_{sa})} \sum_{(n_{is}=n_{is}+1)}^n \sum_{(n_s=n-j_i+1)}^{(n_i-j_s+1)} \sum_{(n_{is}=n_{is}+1)}^{(n_{is}+j_s-j_i)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_s-k-1)} \sum_{(j_i=j_s+s-1)} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{\binom{()}{n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-\mathbb{k}}} \frac{(n_s - j_{sa}^s)!}{(n_s + j_i - n - j_{sa}^s)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_i \wedge$$

$$l_i \leq D + s - n \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} = 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}^i\} \wedge$$

$$s \geq 2 \wedge s = s =$$

$$fz S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i^{l-1} (j_i - s + 1)} \sum_{(j_s=2)}^{l_{ik} + s - k - j_{sa}^{ik} + 1} \sum_{j_i=s+1}^{n_i - j_s + 1} \sum_{n_i=n}^{n_{is} + j_s - j_i} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\begin{aligned}
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{i l - 1} \sum_{(j_s=2)}^{(l_{ik} - k - j_{sa}^{ik} + 2)} \sum_{i=l_{ik}+s-1}^{l_{ik}+1} \sum_{j_{sa}^{ik}+2}^{n - j_i} \\
 & \sum_{n_i=n}^n \sum_{(n_{is}=n_{is}+1)}^{(n_i - j_s + 1)} \sum_{n_s=n - j_i + 1}^{n - j_i} \\
 & \frac{(n_i - n_s - 1)!}{(j_s - 1)! \cdot (n_i - n_s - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=i}^l \sum_{(j_s=1)}^{l_i - i + 1} \sum_{j_i=s}^{n - j_i + 1} \\
 & \sum_{n_i=n}^n \sum_{(n_s=n - j_i + 1)}^{(n_i - j_i + 1)} \\
 & \frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot
 \end{aligned}$$

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$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$\sum_{k=1}^{i^{l-1}} \sum_{(j_s=j_i-s+1)}^{(\quad)} \sum_{j_i=s+1}^{l_{ik}+s-k-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+1}^n \sum_{(j_s=j_i-s+1)}^{(n-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{is}-j_i-j_{sa}^{is}-lk}^{(\quad)} \sum_{(j_s=j_i-s+1)}^{(\quad)}$$

$$\frac{(n_s - j_{sa}^{is})!}{(n_s + j_i - n - j_{sa}^{is})! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=i^l}^{(\quad)} \sum_{(j_s=1)}^{(\quad)} \sum_{j_i=s}$$

$$\sum_{n_i=n+lk}^{(\quad)} \sum_{(n_{ik}=n_i+j_{sa}^{is}-j_s-j_{sa}^{is}+1)}^{(\quad)} \sum_{n_s=n_{ik}+j_s+j_{sa}^{is}-j_i-j_{sa}^{is}-lk}$$

$$\frac{(n_s - j_{sa}^{is})!}{(n_s + j_i - n - j_{sa}^{is})! \cdot (n - j_i)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l_i \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$D \geq n < n \wedge I = \mathbb{k} = 0 \wedge$

$j_{sa}^s \leq j_{sa}^i - 1 \wedge$

$s: \{j_{sa}^s, j_{sa}^i\} \wedge$

$s \geq 2 \wedge s = s \Rightarrow$

$$fz_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(l_i-k-j_{sa}^i+2)} \sum_{=j_s+s-1}^{l_i-k+1} \sum_{n_i=n}^n \sum_{(n_s=n-j_s+1)}^{(n_i-j_i+1)} \frac{(n_i-j_i+1)!}{(j_i-2)! \cdot (n_i-n_s-j_i+1)!} \cdot \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \frac{(l_i-l_s-s+1)!}{(j_s+l_i-j_i-l_s)! \cdot (j_i-j_s-s+1)!} \cdot \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \sum_{k=i}^{()} \sum_{(j_s=1)}^{l_i-i+1} \sum_{j_i=s}^{l_i-i+1} \sum_{n_i=n}^n \sum_{(n_s=n-j_i+1)}^{(n_i-j_i+1)} \frac{(n_i-n_s-1)!}{(j_i-2)! \cdot (n_i-n_s-j_i+1)!} \cdot \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!}$$

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$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - j_s - s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$\sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j_i=j_s+s-1}^{(n-j_s+1)}$$

$$\sum_{n_i=n+l_k}^{(n-j_s+1)} \sum_{n_s=n+l_k}^{(n-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_i-j_{sa}^{ik}}^{(n_s-j_{sa}^{ik})} \frac{(n_s - j_{sa}^{ik})!}{(n_s + j_i - n - j_{sa}^{ik})! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=i}^{(i)} \sum_{(j_s=1)} \sum_{j_i=s}$$

$$\sum_{n_i=n+l_k}^{(i)} \sum_{(n_{ik}=n_i+j_{sa}^{ik}-j_s-j_{sa}^{ik}+1)}^{(i)} \sum_{n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^{ik}}^{(i)}$$

$$\frac{(n_s - j_{sa}^{ik})!}{(n_s + j_i - n - j_{sa}^{ik})! \cdot (n - j_i)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} = 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^l - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}^l\} \wedge$$

$$s \geq 2 \wedge s = s \Rightarrow$$

$$fz S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i^{l-1} (j_i - s + 1) l_{ik} - k - j_{sa}^{ik} + 1} \sum_{j_i = l_{ik} - D}^{n - (n_i - j_s + 1) - j_i} \sum_{n_i = n - (n_{is} - 1) - n_s = n - j_i + 1}^n \frac{(n_i - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(j_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{i^{l-1} (l_{ik} - k - j_{sa}^{ik} + 2)} \sum_{(j_s=2)}^{l_i - k + 1} \sum_{j_i = l_{ik} + s - k - j_{sa}^{ik} + 2}^{n_i + j_s - j_i} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s - 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{k=1}^{(n_s - l_i) - l_i + 1} \sum_{(j_s=1)}^{(n_i - j_i + 1)} \sum_{n_i=n}^{(n_s - l_i - j_i + 1)} \frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_i-s+1)}^{(n_s - l_i) - l_i + 1} \sum_{j_i=l_i+n-D}^{(n_i - j_s + 1)} \sum_{n_i=n+k}^n \sum_{(n_{iS}=n+k-j_s+1)}^{(n_i - j_s + 1)} \sum_{n_{ik}=n_{is}+j_{sa}^s - j_{sa}^{ik}}^{(n_s - j_{sa}^s)!} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik} - j_i - j_{sa}^s - k)}^{(n_s - j_{sa}^s)!} \cdot \frac{(n_s - j_{sa}^s)!}{(n_s + j_i - n - j_{sa}^s)! \cdot (n - j_i)!}$$

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$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge I = \mathbb{K} = 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}^i\} \wedge$$

$$s \geq 2 \wedge s = s \Rightarrow$$

$$fz = \sum_{k=1}^{l_i+n-D-s} \sum_{(j_s=2)}^{l_i-k+1} \sum_{j_i=l_i+n-D}^{n_i-n_{is}-1} \sum_{n_i=n}^{n_i-j_s+1} \sum_{(n_{is}=n-j_s+1)}^{n_{is}+j_s-j_i} \sum_{n_s=n-j_i+1}^{(n_i-n_{is}-1)!} \cdot \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

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$$\begin{aligned}
 & \sum_{k=1}^{i^{l-1}} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{ik-k-j_s^{ik}+2})} \sum_{j_i=j_s+s-1}^{l_i-k+1} \\
 & \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i}^{n_{is}+j_s-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l_i - k + 1)!}{(l_s - l_i - s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_s - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{i^l} \sum_{(j_s=1)}^{()} \sum_{j_i=l_i+n-D}^{l_i-i^{l+1}} \\
 & \sum_{n_i=n}^n \sum_{(n_s=n-j_i+1)}^{(n_i-j_i+1)} \\
 & \frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -
 \end{aligned}$$

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$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j_i=j_s+s-1} \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik})}^{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_{sa}^s-l_k)} \frac{(n_s-j_s)!}{(n_s+j_s-n-j_{sa}^s)! \cdot (n-j_i)!} \cdot \frac{(l_s-k-1)!}{(l_s-k+1)! \cdot (j_s-2)!} \cdot \frac{(D-j_s+1)!}{(D+j_s-n-l_i)! \cdot (n-j_i)!}$$

- $D \geq n < n \wedge l_s \leq D - n + 1 \wedge$
- $1 \leq j_s \leq j_i - s + 1 \wedge$
- $j_s + s - 1 \leq j_i \leq n \wedge$
- $l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - j_{sa}^s = l_{ik} \wedge$
- $D + s - n < l_i \leq l_i + l_s + s - n - 1 \wedge$
- $D > n < n \wedge l_s = l_k = 0$
- $j_{sa}^s < j_{sa}^i - 1 \wedge$
- $s \in \{j_{sa}^s, j_{sa}^i\} \wedge$
- $s \geq 2 \wedge s = j_s$

$$fz S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(j_i-s+1)} \sum_{j_i=l_{ik}+n+s-D-j_{sa}^{ik}}^{l_s+s-k} \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\begin{aligned}
 & \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(l_i)!}{(D + j_i - n - l_i)! \cdot (j_i)!} + \\
 & \sum_{k=0}^{i-1} \sum_{j_s=1}^{(l_s - k)} \sum_{j_i=k+1}^{(l_s - k + j_s - 1)} \sum_{n_{is}=n - j_s + 1}^{(n_i - j_s + 1)} \sum_{n_s=n - j_i + 1}^{(n_{is} + j_s - j_i)} \\
 & \frac{(n_i - n_{is} - 1)!}{(i - l_i - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=0}^{(i)} \sum_{j_s=1}^{(l_s - k)} \sum_{j_i=l_{ik} + n + s - D - j_s}^{(l_{ik} + s - i - j_s)} \\
 & \sum_{n_i=n}^n \sum_{n_s=n - j_i + 1}^{(n_i - j_i + 1)}
 \end{aligned}$$

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$$\frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - l_s - 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_i-s)}^{()} \sum_{(i=l_{ik}+n+s-D-k)}^{l_s+s}$$

$$\sum_{n_i=n+k}^n \sum_{(n_s=n-k)}^{(n_i-j_s+1)}$$

$$\sum_{(i=n_{is}+j_{sa}^s-j_{sa}^{ik})} \sum_{(s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-k)}^{()}$$

$$\frac{(n_s - j_{sa}^s)!}{(n_s + j_i - n - j_{sa}^s)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + 1 \leq j_i - s$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$l_i + s - 1 < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} = 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}^i\} \wedge$$

$$s \geq 2 \wedge s = s \Rightarrow$$

$$fz S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(l_{ik}+n-D-j_{sa}^{ik})} l_{ik+s-k-j_{sa}^{ik}+1} \sum_{j_i=l_{ik}+n+s-D-j_{sa}^{ik}}^{n} \sum_{n_i=n}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i + l_s - s + 1)!}{(l_i + l_s - s + 1)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{i-1} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_s-k+1)} l_{ik+s-k-j_{sa}^{ik}+1} \sum_{j_i=j_s+s-1}^{n} \sum_{n_i=n}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

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$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{l_i} \sum_{(j_s=1)}^{l_{ik}+s-i-l-j_{sa}^{ik}+1} \sum_{j_i=l_{ik}+n+s-D-j_{sa}^{ik}}^{n-j_i+1}$$

$$\frac{(n_s - n_s - 1)!}{(i - 2)! \cdot (n_s - j_i + 1)!} \cdot$$

$$\frac{(n_s - n - 1)! \cdot (n - j_i)!}{(l_i - l_s - s + 1)! \cdot (j_i - s)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

$$\sum_{k=1}^{D+l_s+n-l_i} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_s-k+1)} \sum_{j_i=j_s+s-1}^{(n_i-j_s+1)}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-k)} \sum_{(j_s=1)}^{(n_s-j_{sa}^s)}$$

$$\frac{(n_s - j_{sa}^s)!}{(n_s + j_i - n - j_{sa}^s)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

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$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l_i \leq D + s - n) \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_i - j_{sa}^{ik} + 1 > l_s \wedge$$

$$l_i \leq D + s - n)) \wedge$$

$$(D \geq n < n \wedge I = \mathbb{k} = 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}^i\} \wedge$$

$$s \geq 2 \wedge s = s \Rightarrow$$

$$\begin{aligned}
fz_{j_s, j_i}^{DOSD} &= \sum_{k=1}^{i^{l-1} (j_i - s + 1) l_s + s - k} \sum_{(j_s=2)} \sum_{j_i=s+1} \\
&\sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i - j_s + 1)} \sum_{n_s=n-j_i}^{n_{is} + j_s - j_i} \\
&\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
&\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
&\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
&\frac{(l_s - j_s - k + 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
&\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
&\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!} + \\
&\sum_{k=1}^{i^{l-1} (l_s - k + 1) l_i - k + 1} \sum_{(j_s=2)} \sum_{j_i=l_s+s-k+1} \\
&\sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i - j_s + 1)} \sum_{n_s=n-j_i+1}^{n_{is} + j_s - j_i} \\
&\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
&\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
&\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
&\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
&\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot
\end{aligned}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{l_i} \sum_{(j_s=1)}^{()} \sum_{j_i=s}^{l_i - i^{l+1}}$$

$$\sum_{n_i=n}^n \sum_{(n_i=n-j_i+1)}^{(n_i-j_i+1)}$$

$$\frac{(n_s - n_s - 1)!}{(j_i - 2)! \cdot (n_i - j_i + 1)!} \cdot$$

$$\frac{(l_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_i - j_i - 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - s)!} -$$

$$\sum_{k=1}^{l_i-1} \sum_{(j_s=j_i-s+1)}^{()} \sum_{j_i=s+1}^{l_s+s-k}$$

$$\sum_{n_i=n+k}^n \sum_{(n_i=n+k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s - j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^k - j_i - j_{sa}^{lk})}^{()}$$

$$\frac{(n_s - j_{sa}^s)!}{(n_s + j_i - n - j_{sa}^s)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

$$\sum_{k=1}^{()} \sum_{(j_s=1)}^{()} \sum_{j_i=s}$$

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$$\sum_{n_i = \mathbb{n} + \mathbb{k}}^n \sum_{\binom{()}{n_{ik} = n_i + j_{sa}^s - j_s - j_{sa}^{ik} + 1}} \sum_{n_s = n_{ik} + j_s + j_{sa}^{ik} - j_i - j_{sa}^{-\mathbb{k}}} \frac{(n_s - j_{sa}^s)!}{(n_s + j_i - n - j_{sa}^s)! \cdot (n - j_i)!} \cdot \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - l_i)!}$$

$$((D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$(l_i \leq D + s - n) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} = 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^l - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}^l\} \wedge$$

$$s \geq 2 \wedge s = s \Rightarrow$$

$$fzS_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(l_s-k+1)} \sum_{j_i=j_s+s-1}^{l_i-k+1} \sum_{n_i=n}^n \sum_{(n_{is}=n-1)}^{(n_i-j_s+1)} \sum_{(n_s=n-j_i+1)}^{(n_{is}+j_s-j_i)} \frac{(n_i - n_s - 1)!}{(j_s - 2)! \cdot (n_i - n_s - j_s + 1)!} \cdot \frac{(n_i - n_s - 1)!}{(n_i - j_s - 1)! \cdot (n_{is} + j_s - j_i - 1)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=i}^{()} \sum_{(j_s=1)}^{l_i - i + 1} \sum_{j_i=s} \sum_{n_i=n}^n \sum_{(n_s=n-j_i+1)}^{(n_i-j_i+1)} \frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!}$$

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$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$\sum_{k=1}^{i^{l-1} (l_s - k + 1)} \sum_{(j_s=2)} \sum_{j_i=j_s+s-1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_i+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{ik}+j_s+j_{sa}^{ik}-j_i-l_k)}^{(n_{ik}+j_s+j_{sa}^{ik}-j_i-l_k)}$$

$$\frac{(n_s - j_{sa}^s)!}{(n - j_s - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k)}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=i^l}^{()} \sum_{(j_s=1)} \sum_{j_i=s}$$

$$\sum_{n_i=n+l_k}^{()} \sum_{(n_{ik}=n_i+j_{sa}^s-j_s-j_{sa}^{ik}+1)}^{()} \sum_{n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-l_k}$$

$$\frac{(n_s - j_{sa}^s)!}{(n_s + j_i - n - j_{sa}^s)! \cdot (n - j_i)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$((D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$l_i \leq i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$D \geq n < n \wedge l = k = 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}^i\}$$

$$s \geq 2 \wedge s = s \Rightarrow$$

$$f_Z S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(j_i-s+1)} \sum_{j_i=l_i+n-D}^{l_s+s-k} \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\begin{aligned}
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{i^{l-1} (n_s - 1) \cdot l_i^{i+1}} \sum_{j=2}^{n_s - 1} \sum_{j_i=l_s+s-1}^{n_s - 1} \\
 & \sum_{n_i=n}^{n_i=n-j_s+1} \sum_{n_{is}=n-j_s+1}^{n_{is}+j_s-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_s - n_s - 1)!}{(j_i - 2)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{i^{l-1}} \sum_{j_s=1}^{n_s - 1} \sum_{j_i=l_i+n-D}^{l_i - i^{l+1}} \\
 & \sum_{n_i=n}^n \sum_{n_s=n-j_i+1}^{(n_i - j_i + 1)} \\
 & \frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!} \cdot
 \end{aligned}$$

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$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \binom{()}{(j_s=j_i-s+1)} \sum_{j_i=n-D}^{l_s+s-k}$$

$$\sum_{n_i=n}^n \binom{()}{(n_{is}=n+k-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik} - j_{sa}^{ik} (n_{is}+j_{sa}^{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^{ik})}$$

$$\frac{(n_s - j_{sa}^s)!}{(n_s + j_i - n - j_{sa}^s)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$(D \geq n < D - l_s \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < D - l_s \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1)) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} = 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}^i\} \wedge$$

$$s \geq 2 \wedge s = s \Rightarrow$$

$$\begin{aligned} z S_{j_s, j_i}^{DOSD} &= \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(l_i+n-D-s)} \sum_{j_i=l_i+n-D}^{l_i-k+1} \\ &\sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ &\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\ &\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\ &\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\ &\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \end{aligned}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{i-1} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)} \sum_{j_i=j_s+s-1}^{l_i-k+1}$$

$$\sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_s=n-j_i+1)}^{n_{is}+j_s}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_s - j_i + 1)!} \cdot$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot$$

$$\frac{(n_s - j_i - n - 1)!}{(n_s - j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_i - j_s - k - 1)!}{(l_i - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s - l_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{i-1} \sum_{(j_s=1)}^{()} \sum_{j_i=l_i+n-D}^{l_i-i+1}$$

$$\sum_{n_i=n}^n \sum_{(n_s=n-j_i+1)}^{(n_i-j_i+1)}$$

$$\frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

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$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)} \sum_{j_i=j_s+s-1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^i}^{(\cdot)} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_{sa}^i-\mathbb{k})}^{(\cdot)} \frac{(n_s+j_{sa}^i-j_{sa}^i)!}{(n_s+j_{sa}^i-j_{sa}^i-j_i)!} \cdot \frac{(l_s-k-1)!}{(j_s-k+1)! \cdot (j_s-2)!} \cdot \frac{(D+j_s-n-l_i)!}{(D+j_s-n-l_i)! \cdot (n-j_i)!}$$

$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_i - s + 1 \wedge$

$j_s + s - 1 \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa}^i = l_{ik} \wedge l_{sa} + j_{sa} - s > l_{sa} \wedge$

$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$

$D > n < n \wedge \mathbb{k} =$

$j_{sa}^s < j_{sa}^i - 1 \wedge$

$s: \{j_{sa}^s\} \wedge$

$s \geq 2 \wedge s =$

$$fz S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i^{l-1} (j_i-s+1)} \sum_{(j_s=2)}^{l_{sa}+s-k-j_{sa}+1} \sum_{j_i=l_i+n-D} \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\begin{aligned}
 & \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(l_i)!}{(D + j_i - n - l_i)! \cdot (j_i)!} + \\
 & \sum_{k=1}^{i-1} \sum_{s=2}^{(l_{sa}-k-j_{sa}+2)} \sum_{j=0}^{l_i-k+1} \frac{(n_{is}-j_s+1) \cdot (n_{is}+j_s-j_i)}{(n_{is}=n-j_s+1) \cdot (n_s=n-j_i+1)} \\
 & \frac{(n_i - n_{is} - 1)!}{(i - l_i)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{i-1} \sum_{j_s=1}^{()} \sum_{j_i=l_i+n-D}^{l_i-i+1} \\
 & \sum_{n_i=n}^n \sum_{(n_s=n-j_i+1)}^{(n_i-j_i+1)}
 \end{aligned}$$

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$$\frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \binom{D+l_s+s-n-l_i}{(j_s=j_i+k+1)} \sum_{j_i=l_i+n-k}^{\binom{D+l_s+s-n-l_i}{j_i=l_i+n-k}} \binom{D+l_s+s-n-l_i}{j_i=l_i+n-k}$$

$$\sum_{n_i=n+l_k}^n \binom{n}{n_i=n+l_k} \binom{n_i-j_s+1}{n_i=n+l_k} \binom{n_i-j_s+1}{n_i=n+l_k}$$

$$\sum_{n_i=n+l_k}^n \binom{D+l_s+s-n-l_i}{n_i=n+l_k} \binom{D+l_s+s-n-l_i}{n_i=n+l_k} \sum_{j_s=n_i+k}^{\binom{D+l_s+s-n-l_i}{j_s=n_i+k}} \binom{D+l_s+s-n-l_i}{j_s=n_i+k}$$

$$\frac{(n_s - j_{sa}^s)!}{(n_s + j_i - n - j_{sa}^s)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1$$

$$1 \leq j_s \leq j_s - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - 1 \leq l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} = 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}^i\} \wedge$$

$$s \geq 2 \wedge s = s \Rightarrow$$

$$\begin{aligned}
fz_{j_s, j_i}^{DOSD} &= \sum_{k=1}^{i^{l-1}} \sum_{(j_s=2)}^{(l_i+n-D-s)} \sum_{j_i=l_i+n-D}^{l_i-k+1} \\
&\sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i}^{n_{is}+j_s-j_i} \\
&\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
&\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
&\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
&\frac{(l_s - j_s - k + 1)!}{(l_s - j_s - 2)!} \cdot \\
&\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
&\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!} + \\
&\sum_{k=1}^{i^{l-1}} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{sa}-k-j_{sa}+2)} \sum_{j_i=j_s+s-1}^{l_i-k+1} \\
&\sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \\
&\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
&\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
&\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
&\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
&\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot
\end{aligned}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{l_i} \sum_{(j_s=1)}^{()} \sum_{j_i=l_i+n-D}^{l_i - i l + 1}$$

$$\sum_{n_i=n}^n \sum_{(n_i=n-j_i+1)}^{(n_i-j_i+1)}$$

$$\frac{(n_s - n_s - 1)!}{(j_i - 2)! \cdot (n_i - j_i + 1)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_i - j_s - 1)!}{(l_i - j_s - l_s + 1)! \cdot (j_i - s)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

$$\sum_{k=1}^{l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(n-k-j_{sa}+2)} \sum_{j_i=j_s+s-1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_i=n+k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s - j_{sa}^{ik}}^{()} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik} - j_i - j_{sa}^{ik})}^{()}$$

$$\frac{(n_s - j_{sa}^s)!}{(n_s + j_i - n - j_{sa}^s)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

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$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} = 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}^i\} \wedge$$

$$s \geq 2 \wedge s = s \Rightarrow$$

$$fz_{j_s, j_i}^{SDOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(j_i-1)} \sum_{j_i=l_{ik}+s-k-j_{sa}+1}^{l_{ik}+s-k-j_{sa}+1} \frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j_i=l_{ik}+s-k-j_{sa}^{ik}+2}^{l_{sa}+s-k-j_{sa}+1} \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - 1)!}{(j_s + l_i - j_i - 1)! \cdot (j_i - j_s + 1)!}$$

$$\frac{(n - l_i)!}{(n - j_i - 1)! \cdot (n - j_i)!}$$

$$\sum_{i=1}^n \sum_{j_s=1}^{l_{sa}} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{sa}+n+s-D-j_{sa}+1}$$

$$\sum_{n_i=n}^n \sum_{(n_s=n-j_i+1)}^{(n_i-j_i+1)}$$

$$\frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_i-s+1)}^{()} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{ik}+s-k-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{\binom{()}{n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-k}} \frac{(n_s - j_{sa}^s)!}{(n_s + j_i - n - j_{sa}^s)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa}^{ik} \wedge l_i + j_s - s = l_s \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1$$

$$D \geq n < n \wedge I = \mathbb{k} = 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}^i\} \wedge$$

$$s \geq 2 \wedge s = s =$$

$$S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i^{l-1} (l_{sa}+n-D-j_{sa})} \sum_{\binom{()}{j_s=2}} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{sa}+s-k-j_{sa}+1} \sum_{n_i=n}^n \sum_{\binom{()}{n_{is}=n-j_s+1}}^{(n_i-j_s+1)} \sum_{\binom{()}{n_s=n-j_i+1}}^{n_{is}+j_s-j_i} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

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$$\begin{aligned}
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{i-1} \sum_{(j_s=l_{sa}+n-D-j_s+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j_i=j_s-1}^{l_{sa}+n-k-j_{sa}+1} \frac{(n_i - j_s + 1)!}{(j_s - 1)! \cdot (n_i - n_s + 1)!} \cdot \\
 & \sum_{n_i=n}^n \sum_{(n_s=n_i+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n-j_i} \frac{(n_{is} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{i-1} \sum_{(j_s=1)}^{()} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{sa}+s-i-l-j_{sa}+1} \frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot
 \end{aligned}$$

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$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j_i=j_s+s-1}^{(j_s+1)} \frac{(n - j_s + 1)!}{(n - j_s + 1)! \cdot (j_s + 1)!} \cdot \frac{(n_s - j_{sa})!}{(n_s + j_i - n - j_{sa})! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s \leq D - n + 1$$

$$1 \leq j_s \leq j_i - s + 1$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \wedge$$

$$D \geq n < n \wedge l = k = 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^l - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}^l\} \wedge$$

$$s \geq 2 \wedge s = s \Rightarrow$$

$$fz_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i-l-1} \sum_{(j_s=2)}^{(j_s+1)} \sum_{j_i=l_s+n+s-D-j_{sa}}^{l_s+n+s-D-j_{sa}+1} \sum_{n_i=n}^{n_i=n} \sum_{(n_{is}=n-j_s+1)}^{(n_{is}=n-j_s+1)} \sum_{n_s=n-j_i+1}^{n_s=n-j_i+1} \frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{i-l-1} \sum_{(j_s=2)}^{(l_s-k+1)} \sum_{j_i=l_s+s-k+1}^{l_{sa}+s-k-j_{sa}+1} \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s + 1)! \cdot (j_i - j_s + 1)!}$$

$$\frac{(n - l_i)!}{(n - l_i - 1)! \cdot (n - j_i)!}$$

$$\sum_{j_s=1}^{l_s} \sum_{j_i=l_s+n+s-D-j_s}^{n-l_s} \binom{n-l_s}{j_s} \binom{n-l_s}{j_i}$$

$$\sum_{n_i=n}^n \sum_{(n_s=n-j_i+1)}^{(n_i-j_i+1)}$$

$$\frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \binom{n-l_i}{j_s=j_i-s+1} \sum_{j_i=l_s+n+s-D-j_s}^{l_s+s-k}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{\binom{()}{n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-\mathbb{k}}} \frac{(n_s - j_{sa}^s)!}{(n_s + j_i - n - j_{sa}^s)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$((D \geq n < n \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_i - s + 1 \wedge$

$j_s + s - 1 \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - l_{ik} \wedge l_i + j_{sa} - s = l_s \wedge$

$D + s - n < l_i \leq D + l_s + s - n - 1)) \wedge$

$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_i - s + 1 \wedge$

$j_s + s - 1 \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$D + s - n < l_i \leq D + l_s + s - n - 1)) \wedge$

$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_i - s + 1 \wedge$

$j_s + s - 1 \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$D + s - n < l_i \leq D + l_s + s - n - 1)) \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = \mathbb{k} = 0 \wedge$

$j_{sa}^s \leq j_{sa}^i - 1 \wedge$

$s: \{j_{sa}^s, j_{sa}^i\} \wedge$

$s \geq 2 \wedge s = s \Rightarrow$

$$\begin{aligned}
f_z S_{j_s, j_i}^{DOSD} = & \sum_{k=1}^{i^{l-1} (l_{sa} + n - D - j_{sa})} \sum_{(j_s=2)}^{l_{sa} + s - k - j_{sa} + 1} \sum_{j_i = l_{sa} + n + s - D - j_{sa}} \\
& \sum_{n_i = n}^n \sum_{(n_{is} = n - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_s = n - j_i}^{n_{is} + j_s - j_i} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - j_s - k + 1)!}{(l_s - j_s - 2)!} \cdot \\
& \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=1}^{i^{l-1} (l_s - k - 1)} \sum_{(j_s = l_{sa} + n - D - j_{sa} + 1)}^{l_{sa} + s - k - j_{sa} + 1} \sum_{j_i = j_s + s - 1} \\
& \sum_{n_i = n}^n \sum_{(n_{is} = n - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_s = n - j_i + 1}^{n_{is} + j_s - j_i} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot
\end{aligned}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{j_i} \sum_{(j_s=1)}^{()} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{sa}+s-i-l-j_{sa}+1}$$

$$\sum_{n_i=n}^n \sum_{(n_i-j_i+1)}^{(n_i-j_i+1)}$$

$$\frac{(n_s - n_s - 1)!}{(j_i - 2)! \cdot (n_i - j_i + 1)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_i - j_i - 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

$$\sum_{k=1}^{D+j_i-s-n-l_i} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{s-k-1} \sum_{j_i=j_s+s-1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_i=n+k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{()} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-k)}^{()}$$

$$\frac{(n_s - j_{sa}^s)!}{(n_s + j_i - n - j_{sa}^s)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

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$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa}^s = j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, k, j_{sa}^i\} \wedge$$

$$s = 2 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{D-n+1} \sum_{j_i=l_i+n-D-j_{sa}^{ik}+1}^{(j_i-s+1)} \sum_{j_i=l_i+n-D}^{l_{ik}+k+1} \sum_{n_i=n+k}^n \sum_{n_{is}=n+k-j_s+1}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k} \frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{D-n+1} \sum_{j_s=l_{ik}+n-D-j_{sa}^{ik}+1}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j_i=l_{ik}+s-k-j_{sa}^{ik}+2}^{l_i-k+1} \sum_{n_i=n+k}^n \sum_{n_{is}=n+k-j_s+1}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k}$$

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$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - 1)!}{(j_s + l_i - j_i - 1)! \cdot (j_i - j_s + 1)!} \cdot \frac{(n - l_i)!}{(n - j_i - 1)! \cdot (n - j_i)!} \cdot \sum_{k=0}^{l_s + s - n - j_i} \binom{l_s + s - n - j_i}{k} \sum_{j_i = l_i + n - D}^{j_{sa}^{ik} + 1} \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{k = n_{is} + j_{sa}^s - j_{sa}^{ik}}^{(n_s = n_{ik} + j_s + j_{sa}^{ik} - j_i - j_{sa}^s - \mathbb{k})} \frac{(n_s - j_{sa}^s)!}{(n_s + j_i - n - j_{sa}^s)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa}^s = j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s = 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$fz_{j_s, j_i}^{SDOSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_i+n-D-s)} \sum_{l_i-k+1}^{l_i-k+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_i+1)} \sum_{n_s=n-j_i+1}^{n_{is}-j_i-\mathbb{k}} \frac{(n_i-j_i-1)!}{(j_i-2)! \cdot (n_i-j_i-j_s+1)!} \cdot \frac{(n_i-n_s-1)!}{(j_i-j_s-1)!} \cdot \frac{(n_s-1)!}{(n_s-j_i-n-1)! \cdot (n-j_i)!} \cdot \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \frac{(l_i-l_s-s+1)!}{(j_s+l_i-j_i-l_s)! \cdot (j_i-j_s-s+1)!} \cdot \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \sum_{k=1}^{D-n+1} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j_i=j_s+s-1}^{l_i-k+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}} \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_s-1)!}{(j_i-j_s-1)! \cdot (n_{is}+j_s-n_s-j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s - 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+l_s-k+1)}^{(l_{ik}-l_s-k+2)} \sum_{(j_i=j_s+l_s-k)}^{(D-s+1)} \sum_{(n_i=n+l_k)}^n \sum_{(n_{is}=n+l_k)}^{(n_i-j_s+1)} \sum_{(n_{is}=n+l_k)}^{(n_i-j_s+1)} \binom{(\cdot)}{s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-k}$$

$$\frac{(n_s - j_{sa}^s)!}{(n_s + j_i - n - j_{sa}^s)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq 1 \wedge n < n \wedge l_s > D + n + 1 \wedge$$

$$2 \leq j_s \leq j_s + s + 1 \wedge$$

$$j_s + s + 1 \leq j_i - s - 1 \wedge$$

$$l_{ik} - j_{sa}^{ik} + s > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$s \geq n - l_i \wedge I = k \geq 0 \wedge$$

$$j_{sa}^s = j_{sa}^l - 1 \wedge$$

$$s: \{j_{sa}^s, k, j_{sa}^l\} \wedge$$

$$s = 2 \wedge s = s + k \wedge$$

$lk_z: z = 1 \Rightarrow$

$$\begin{aligned}
 f_z S_{j_s, j_i}^{DOSD} = & \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(j_i-s+1)} \sum_{j_i=l_{ik}+n+s-D-j_{s_a}^{ik}}^{l_s+s-k} \\
 & \sum_{n_i=n+lk}^n \sum_{(n_{is}=n+lk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+}^{n_{is}+j_s-j_i-lk} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \\
 & \frac{(n_i - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \\
 & \frac{(n_i - l_s - s + 1)!}{(n_i + l_i - j_i - s)! \cdot (j_i - j_s - s + 1)!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)} \sum_{j_i=l_s+s-k+1}^{l_{ik}+s-k-j_{s_a}^{ik}+1} \\
 & \sum_{n_i=n+lk}^n \sum_{(n_{is}=n+lk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-lk} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \\
 & \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}
 \end{aligned}$$

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$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_i-s+1)}^{(\)} \sum_{j_i=l_{ik}+n+s-D-j_{sa}^{ik}}^{l_s+s-k}$$

$$\sum_{n_i=n+1}^n \sum_{n+1}^{(j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}} \sum_{n_{ik}+j_s^{ik}-j_i-j_{sa}^{ik}}^{(\)}$$

$$\frac{(n_s - j_{sa}^{ik})!}{(n_s + j_i - n - j_{sa}^{ik})! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1$$

$$j_s - s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{ik} + j_{sa}^{ik} - l_{ik} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} \geq 0$$

$$j_{sa}^s = i_a - 1$$

$$s: (j_{sa}^s, \mathbb{k}, j_s) \wedge$$

$$= 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_{zS}^{DOSD}_{j_s, j_i} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_{ik}+n-D-j_{sa}^{ik})} \sum_{j_i=l_{ik}+n+s-D-j_{sa}^{ik}}^{l_{ik}+s-k-j_{sa}^{ik}+1}$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-l_k} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{D-n+1} \sum_{j_i=j_s+1}^{(l_s+1)} \sum_{j_i=j_s+s-1}^{l_{ik}+s-k-j_{sa}^{ik}+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-l_k} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

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$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_s-k+1)} \sum_{j_i=j_s+s-1}^{(n_i-j_s+1)} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_{sa}^s-k)} \frac{(n_s-j_{sa}^s)!}{(n_s+j_s-j_{sa}^s)! \cdot (n_i-j_i)!} \cdot \frac{(l_s-k-1)!}{(l_s-k+1)! \cdot (j_s-2)!} \cdot \frac{(D-j_s)}{(D+j_s-n-l_i)! \cdot (n-j_i)!}$$

$$\begin{aligned} & ((D \geq n < n \wedge l_s > D - n + 1 \wedge \\ & 2 \leq j_s \leq j_i - s + 1 \wedge \\ & j_s + s - 1 \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik}) \vee \\ & (D \geq n < n \wedge l_s > D - n + 1 \wedge \\ & 2 \leq j_s \leq j_i - s + 1 \wedge \\ & j_s + s - 1 \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik}) \vee \\ & ((D \geq n < n \wedge l_s > D - n + 1 \wedge \\ & 2 \leq j_s \leq j_i - s + 1 \wedge \\ & j_s + s - 1 \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik})) \wedge \\ & D \geq n < n \wedge I = \mathbb{k} \geq 0 \wedge \\ & j_{sa}^s = j_{sa}^i - 1 \wedge \end{aligned}$$

$$s: \{j_{sa}^s, k, j_{sa}^i\} \wedge$$

$$s = 2 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$fz S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(j_i-s+1)} \sum_{j_i=l_i+n}^{l_s+s-k} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+l_s-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k} \frac{(j_s-2)! \cdot (n_i-n_{is}-1)!}{(j_i-j_s-1)! \cdot (n_{is}+j_s-n_s-j_i)!} \cdot \frac{(n_s-1)!}{(n_s+j_i-1)! \cdot (n-j_i)!} \cdot \frac{(l_s-k-1)!}{(l_s+j_s-k+1)! \cdot (j_s-2)!} \cdot \frac{(l_i-l_s-s+1)!}{(j_s+l_i-j_i-l_s)! \cdot (j_i-j_s-s+1)!} \cdot \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)} \sum_{j_i=l_s+s-k+1}^{l_i-k+1} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+l_s-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k} \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_s-1)!}{(j_i-j_s-1)! \cdot (n_{is}+j_s-n_s-j_i)!} \cdot \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!}$$

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$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_i-s+1)}^{()} \sum_{j_i=n-D}^{l_s+s-k} \sum_{n_i=n}^n \sum_{(n_{is}=n+k-j_s+1)}^{()} \sum_{(n_{ik}=n_{is}-j_{sa}^{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^{ik})}^{()} \frac{(n_s - j_{sa}^s)!}{(n_s + j_{sa}^s - n - j_{sa}^s)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\begin{aligned} & ((D \geq n < n \wedge l_s > D - n + 1 \wedge \\ & 2 \leq j_s \leq j_i - s + 1 \wedge \\ & j_s + s - 1 \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik}) \vee \\ & (D \geq n < n \wedge l_s > D - n + 1 \wedge \\ & 2 \leq j_s \leq j_i - s + 1 \wedge \\ & j_s + s - 1 \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik}) \vee \\ & (D \geq n < n \wedge l_s > D - n + 1 \wedge \\ & 2 \leq j_s \leq j_i - s + 1 \wedge \end{aligned}$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik}) \wedge$$

$$D \geq n < n \wedge I = k \geq 0 \wedge$$

$$j_{sa}^s = j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, k, j_{sa}^i\} \wedge$$

$$s = 2 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$fz S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D-s)}^{(l_i+n-D-s)} \sum_{j_i=l_i+n-D}^{1} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s)} \sum_{n_s=n-j_i+1}^{(j_s-j_i-k)} \frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{D-n+1} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)} \sum_{j_i=j_s+s-1}^{l_i-k+1} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k}$$

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$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s + 1)!}{(j_s + l_i - j_i - 1)! \cdot (j_i - j_s + 1)!} \cdot \frac{(n - l_i)!}{(n - l_i - 1)! \cdot (n - j_i)!} \sum_{k=1}^{l_s + s - n - l_i} \sum_{j_s = l_i + k}^{n - s + 1} \sum_{j_i = j_s + s - 1}^n \sum_{n_i = n + \mathbb{k}}^n \sum_{n_{is} = n + \mathbb{k} - j_s + 1}^{(n_i - j_s + 1)} \sum_{\substack{(\cdot) \\ k = n_{is} + j_{sa}^s - j_{sa}^{ik} (n_s = n_{ik} + j_s + j_{sa}^{ik} - j_i - j_{sa}^s - \mathbb{k})}} \frac{(n_s - j_{sa}^s)!}{(n_s + j_i - n - j_{sa}^s)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$l_i > l_s - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa}^s = j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s = 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(j_i-s+1)} \sum_{j_i=l_{sa}+s-k-j_{sa}}^{l_{sa}+s-k-j_{sa}} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j+1)} \sum_{n_s=n-j_i+1}^{n_{is}-j_i-\mathbb{k}}$$

$$\frac{(n_i - j_s - 1)!}{(n_i - j_s + 1)!} \cdot \frac{(n_i - n_s - 1)!}{(n_i - n_s + 1)!} \cdot \frac{(j_i - j_s - 1)!}{(j_i - j_s + 1)!} \cdot \frac{(n_s - 1)!}{(n_s + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s - j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{D-n+1} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_{sa}-k-j_{sa}+2)} \sum_{j_i=l_{sa}+s-k-j_{sa}+2}^{l_i-k+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

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$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s - 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_i-k+1)}^{(j_s=l_s+s-j_{sa}+1)} \sum_{j_i=l_i+n-k}^{(n)} \sum_{n_i=n+k}^{(n)} \sum_{(n_i=j_s+1)}^{(n_i-j_s+1)} \sum_{(j_{sa}=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^{ik})}^{(j_{sa}=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^{ik})}$$

$$\frac{(n_s - j_{sa}^s)!}{(n_s + j_i - n - j_{sa}^s)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D - n < n \wedge l_s > n + 1) \wedge$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_i < j_i - s$$

$$j_s + s - 1 < j_i \leq n \wedge$$

$$j_{sa}^{ik} - 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa}^s = j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s = 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$fz_{j_s, j_i}^{S_{DOSD}} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_i+n-D-s)} \sum_{j_i=l_i+n-D}^{l_i-k+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_s - l_s - s + 1)!}{(j_s + j_i - l_s - 1)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{D-n+1} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{sa}-k-j_{sa}+2)} \sum_{j_i=j_s+s-1}^{l_i-k+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

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$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{sa}-k-j_{sa}+2)} \sum_{j_i=j_s+s-1}^{(j_s+1)}$$

$$\sum_{n_i=n}^n \sum_{(n_i=j_s+1)}^{(n_i=j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+1}^{(n_{ik}=n_{is}+1)} \sum_{(n_{ik}=n_{is}+1)}^{(n_{ik}=n_{is}+1)}$$

$$\frac{(n_s - j_s)!}{(n_s + j_i - n - j_{sa})! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > D - n + 1$

$2 \leq j_i \leq j_i - s + 1$

$j_s - s - 1 \leq j_s < n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge j_{sa}^{ik} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$D \geq n \wedge I = k \geq 1$

$j_{sa}^s = j_{sa}^i - 1$

$s: \{j_{sa}, k_s\} \wedge$

$s = 2 \wedge s = s + k \wedge$

$k_z: z = 1 \Rightarrow$

$$f_z^{DOSD}_{j_s, j_i} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(j_i-s+1)} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{ik}+s-k-j_{sa}^{ik}+1}$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-l_k} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{l_i+1} \sum_{(j_s-j_{sa}^{ik}+1)}^{(l_{ik}-k-1)+2} \sum_{j_i=l_{ik}+s-k-j_{sa}^{ik}+2}^{l_{sa}+s-k-j_{sa}^{ik}+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-l_k} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

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$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_i-s+1)}^{(\quad)} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{ik}+s-k-j_{sa}^{ik}+1} \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}}^{(\quad)} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_{sa}-l_k)}^{(\quad)} \frac{(n_s+j_s)!}{(n_s+j_s-n-j_{sa})! \cdot (n-j_i)!} \cdot \frac{(l_s+k-1)!}{(l_s-k+1)! \cdot (j_s-2)!} \cdot \frac{(D-n+l_i)!}{(D+j_s-n-l_i)! \cdot (n-j_i)!}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq j_s \leq j_i - s + 1 \wedge$

$j_s + s - 1 \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} > l_{ik} \wedge l_{sa} - j_{sa} - s = l_{sa} \wedge$

$D \geq n < n \wedge I = \dots \geq 0 \wedge$

$j_s = j_{sa}^i - 1$

$s: \{ \dots, l_k, j_{sa}^i \} \wedge$

$s = 2 \wedge \dots = s + l_k \wedge$

$l_{k_z}: z = 1 \Rightarrow$

$$f_z S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_{sa}+n-D-j_{sa})} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{sa}+s-k-j_{sa}+1} \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-l_k} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(l_i)!}{(D + j_i - n - l_i)! \cdot (j_i)!} +$$

$$\sum_{k=1}^{D-n+1} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{(j_i=j_s+s-1)}^{(l_{sa}+s-k-j_{sa}+1)}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n-j_s+1)} \sum_{n_s=n-j_i+1}^{(n_{is}+j_s-j_i-k)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_i - j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j_i=j_s+s-1}^{(l_{sa}+s-k-j_{sa}+1)}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{()}^{()} \frac{(n_s - j_{sa}^s)!}{(n_s + j_i - n - j_{sa}^s)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$((D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq j_s \leq j_i - s + 1 \wedge$

$j_s + s - 1 \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_s) \vee$

$(D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq j_s \leq j_i - s + 1 \wedge$

$j_s + s - 1 \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$

$(D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq j_s \leq j_i - s + 1 \wedge$

$j_s + s - 1 \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa})) \wedge$

$D \geq n < n \wedge l_s = \mathbb{k} \geq 1 \wedge$

$j_s^s \leq j_{sa}^s - 1 \wedge$

$s: \{j_{sa}^s, \mathbb{k}, j_i^s\} \wedge$

$s = z \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 1 \Rightarrow$

$$f_z S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(j_i-s+1)} \sum_{(j_i=l_{sa}+n+s-D-j_{sa})}^{l_s+s-k}$$

$$\begin{aligned}
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-l_k} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=1}^{D-n+1} \sum_{l_s=l_s+n-D}^{l_s-k+1} \sum_{j_i=l_s+s-k+1}^{l_{sa}+s-k-j_{sa}+1} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-l_k} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -
\end{aligned}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_i-s+1)}^{(\quad)} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_s+s-k} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{(\quad)} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_{sa}^s-\mathbb{k})}^{(\quad)} \frac{(n_s+j_{sa}^s)!}{(n_s+j_{sa}^s-n-j_{sa}^s)! \cdot (j_i)!} \cdot \frac{(l_s+\mathbb{k}-1)!}{(j_i-k+1)! \cdot (j_s-2)!} \cdot \frac{(D)}{(D+j_s-n-l_i)! \cdot (n-j_i)!}$$

$((D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq j_s \leq j_i - s + 1 \wedge$

$j_s + s - 1 \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$

$(D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq j_s \leq j_i - s + 1 \wedge$

$j_s + s - 1 \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$

$(D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq j_s \leq j_i - s + 1 \wedge$

$j_s + s - 1 \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \wedge$

$D \geq n < n \wedge I = \mathbb{k} \geq 0 \wedge$

$j_{sa}^s = j_{sa}^i - 1 \wedge$

$s: \{j_{sa}^s, \mathbb{k}, j_{sa}^i\} \wedge$

$$s = 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z^{S_{j_s, j_i}^{DOSD}} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_{sa}+n-D-j_{sa})} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{sa}+s-k-j_{sa}+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_s - l_s + 1)!}{(j_s + l_s - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{D-n+1} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_s-k-1)} \sum_{j_i=j_s+s-1}^{l_{sa}+s-k-j_{sa}+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_s-k-1)} \sum_{j_i=j_s+s-1}^{(j_s+1)} \sum_{n_i=n}^{(n+j_s+1)} \sum_{n_{ik}=n_{is}+j_s}^{(n_{ik}+j_s-k-j_i-j_{sa}^s-k)} \frac{(n_s - j_s)!}{(n_s + j_i - n - j_{sa}^s)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s \leq D - n + 1$

$1 \leq j_s \leq j_i - s + 1$

$j_s - s - 1 \leq j_i < n \wedge$

$l_{ik} = j_{sa}^{ik} + 1 = l_s + j_{sa}^{ik} - l_{ik} \wedge$

$1 \leq D + j_i - n \wedge$

$D \geq n < n \wedge l_s - k > 1 \wedge$

$j_{sa}^s = j_{sa}^l - 1 \wedge$

$s: \{j_{sa}^s, k, j_i\} \wedge$

$s = 2 \wedge s = s + k \wedge$

$k_z: z = 1 \Rightarrow$

$$fz S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(j_i-s+1)} \sum_{j_i=s+1}^{l_{ik}+s-k-j_{sa}^{ik}+1}$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-l_k} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{s=2}^{i-l-1} \sum_{j_i=l_{ik}+s-k-j_{sa}^{ik}+2}^{(l_{ik}-j_{sa}^{ik}+2)} \sum_{j_i=l_{ik}+s-k-j_{sa}^{ik}+2}^{l_i-k+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-l_k} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +
 \end{aligned}$$

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$$\sum_{k=1}^l \sum_{j_s=1}^{l_i - i^{l+1}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_s=n-j_s)}^{(n_i-j_i-l_k+1)}$$

$$\frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - l_s - s + 1)!}{(l_s - j_i - l_s + 1)! \cdot (j_i - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - s)!}$$

$$\sum_{k=1}^{j_s-1} \sum_{j_s=1}^{l_{ik+s-k-j_{sa}^k+1}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-l_k)}$$

$$\frac{(n_s - j_{sa}^s)!}{(n_s + j_i - n - j_{sa}^s)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^l \sum_{j_s=1}^{l_i - i^{l+1}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{\binom{()}{n_{ik}=n_i+j_{sa}^s-j_s-j_{sa}^{ik}+1}} \sum_{n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-\mathbb{k}} \frac{(n_s - j_{sa}^s)!}{(n_s + j_i - \mathbf{n} - j_{sa}^s)! \cdot (\mathbf{n} - j_i)!} \cdot \frac{(D - l_i)!}{(D + s - \mathbf{n} - l_i)! \cdot (\mathbf{n} - l_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_i \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D \geq \mathbf{n} < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa}^s = j_{sa}^l - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}^l\} \wedge$$

$$s = 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$${}_{j_s, j_i}^{DOSD} = \sum_{k=1}^{l-1} \sum_{(j_s=2)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j_i=j_s+s-1}^{l_i-k+1} \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

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$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=i}^{l_i} \sum_{(j_s=1)}^{l_i - i + 1} \sum_{j_i=s}$$

$$\sum_{n_i=n+k}^n \sum_{(j_i=k+1)}^{(j_i-k+1)}$$

$$\frac{(n_s - n_s - 1)!}{(i - 2)! \cdot (n_s - j_i + 1)!} \cdot$$

$$\frac{(n_s - n - 1)!}{(n - j_i)!} \cdot$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - j_s - s)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - s)!} -$$

$$\sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j_i=j_s+s-1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_i=n+k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik} \ (n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-k)} \sum_{()}$$

$$\frac{(n_s - j_{sa}^s)!}{(n_s + j_i - n - j_{sa}^s)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

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$$\sum_{k=1}^n \sum_{l=1}^{()} \sum_{j_i=s}^{()} \sum_{n_i=n+l}^n \sum_{n_{ik}=n_i+j_{sa}^s-j_s-j_{sa}^{ik}+1}^{()} n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_s^s \frac{(n_s-j_{sa}^s)!}{(n_s+j_i-n-j_{sa}^s)! \cdot (n-j_i)!} \frac{(D-l_i)!}{(D+s-n-l_i)! \cdot (n-s)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa}^s = j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, k, j_{sa}^i\} \wedge$$

$$s = 2 \bullet s = s + k$$

$$k_z, z = 1 \Rightarrow$$

$$fz_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i^{l-1} (j_i-s+1)} \sum_{(j_s=2)}^{l_{ik}+s-k-j_{sa}^{ik}+1} \sum_{j_i=l_i+n-D}^{n_i+n+l} \sum_{(n_{is}=n+l-k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\begin{aligned}
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{i l - 1} \sum_{(j_s=2)}^{(l_{ik} - k - j_{sa}^{ik} + l_i - k)} \sum_{i=l_{ik} + s - k - j_{sa}^{ik}}^{l_i - k} \frac{(n_i - j_s + 1)! \cdot (n_{is} + j_s - j_i - k)!}{\sum_{i=n+k}^{(n_i - n + k - j_s + 1)} \sum_{i=n - j_i + 1}^{(n_i - j_i + 1)}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_s - n_s - 1)!}{(j_i - 2)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{i l} \sum_{(j_s=1)}^{()} \sum_{j_i=l_i+n-D}^{l_i - i l + 1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_s=n-j_i+1)}^{(n_i - j_i - k + 1)} \\
 & \frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!}
 \end{aligned}$$

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$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \binom{()}{(j_s=j_i-s+1)} \sum_{j_i=l_i-n-D}^{l_{ik}+k-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n}^n \sum_{n_{is}=n+k-j_s+1}^{()}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-(n_s+l_s+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-k)}$$

$$\frac{(n_s - j_{sa}^s)!}{(n_s + j_i - n - j_{sa}^s)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n + l_s \leq D - l_s + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 \leq l_s \wedge l_i - j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D - l_s < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n + l_s \wedge l = k \geq 0 \wedge$$

$$j_{sa}^s = j_{sa}^s - 1 \wedge$$

$$s: \{j_{sa}^s, k, j_{sa}^i\} \wedge$$

$$s = 2 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$\begin{aligned}
fz_{j_s, j_i}^{DOSD} &= \sum_{k=1}^{i^{l-1} (l_i + n - D - s)} \sum_{(j_s=2)}^{l_i - k + 1} \sum_{j_i = l_i + n - D} \\
&\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_s = n - j_i}^{n_{is} + j_s - j_i - k} \\
&\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
&\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
&\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
&\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
&\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
&\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!} + \\
&\sum_{k=1}^{i^{l-1} (l_{ik} - k - j_{sa}^{ik} + 2)} \sum_{(j_s = l_i + n - D - s + 1)}^{l_i - k + 1} \sum_{j_i = j_s + s - 1} \\
&\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_s = n - j_i + 1}^{n_{is} + j_s - j_i - k} \\
&\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
&\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
&\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
&\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
&\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot
\end{aligned}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{l_i} \sum_{(j_s=1)}^{()} \sum_{j_i=l_i+n-D}^{l_i-i+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_i=n-j_i+1)}^{(n_i-j_i-k)}$$

$$\frac{(n_s - n_s - 1)!}{(j_i - 2)! \cdot (n_i - 1)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_i - l_s - 1)!}{(l_i - l_s + 1)! \cdot (j_i - s)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

$$\sum_{k=1}^{l_i+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(k-k-j_{sa}^{ik}+2)} \sum_{j_i=j_s+s-1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_i=n+k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^{-k})}^{()}$$

$$\frac{(n_s - j_{sa}^s)!}{(n_s + j_i - n - j_{sa}^s)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

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$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa}^s = j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, k, j_{sa}^i\} \wedge$$

$$s = 2 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$f_z^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(j_i-s+1)} \sum_{l_s=s-k}^{l_s+s-k} \sum_{n_i=n+k}^{n_i+j_s-1} \sum_{n_{is}=n+k-j_s+1}^{n_{is}+j_s-j_i-k} \sum_{n_s=n-j_i+1}^{n_s+n-j_i-k} \frac{(n_i - n_{is} - 1)!}{(i - l - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(l_s-k+1)} \sum_{j_i=l_s+s-k+1}^{l_{ik}+s-k-j_{sa}^{ik}+1} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k}$$

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$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - s + 1)! \cdot (j_i - j_s - s + 1)!} \cdot$$

$$\frac{(n - l_i)!}{(n - l_i - 1)! \cdot (n - j_i)!} \cdot$$

$$\sum_{l=0}^{(n-l_i)} \sum_{j_s=1}^{l_i} \sum_{j_i=l_i+n+s-D-j_s a}^{l_i+k+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_s=n-j_i+1)}^{(n_i-j_i-l_k+1)}$$

$$\frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_i-s+1)}^{(n-l_i)} \sum_{j_i=l_i+n+s-D-j_s a}^{l_s+s-k}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}} \sum_{\binom{()}{n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-\mathbb{k}}} \frac{(n_s - j_{sa}^s)!}{(n_s + j_i - n - j_{sa}^s)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_i - s + 1 \wedge$

$j_s + s - 1 \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$

$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$

$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$

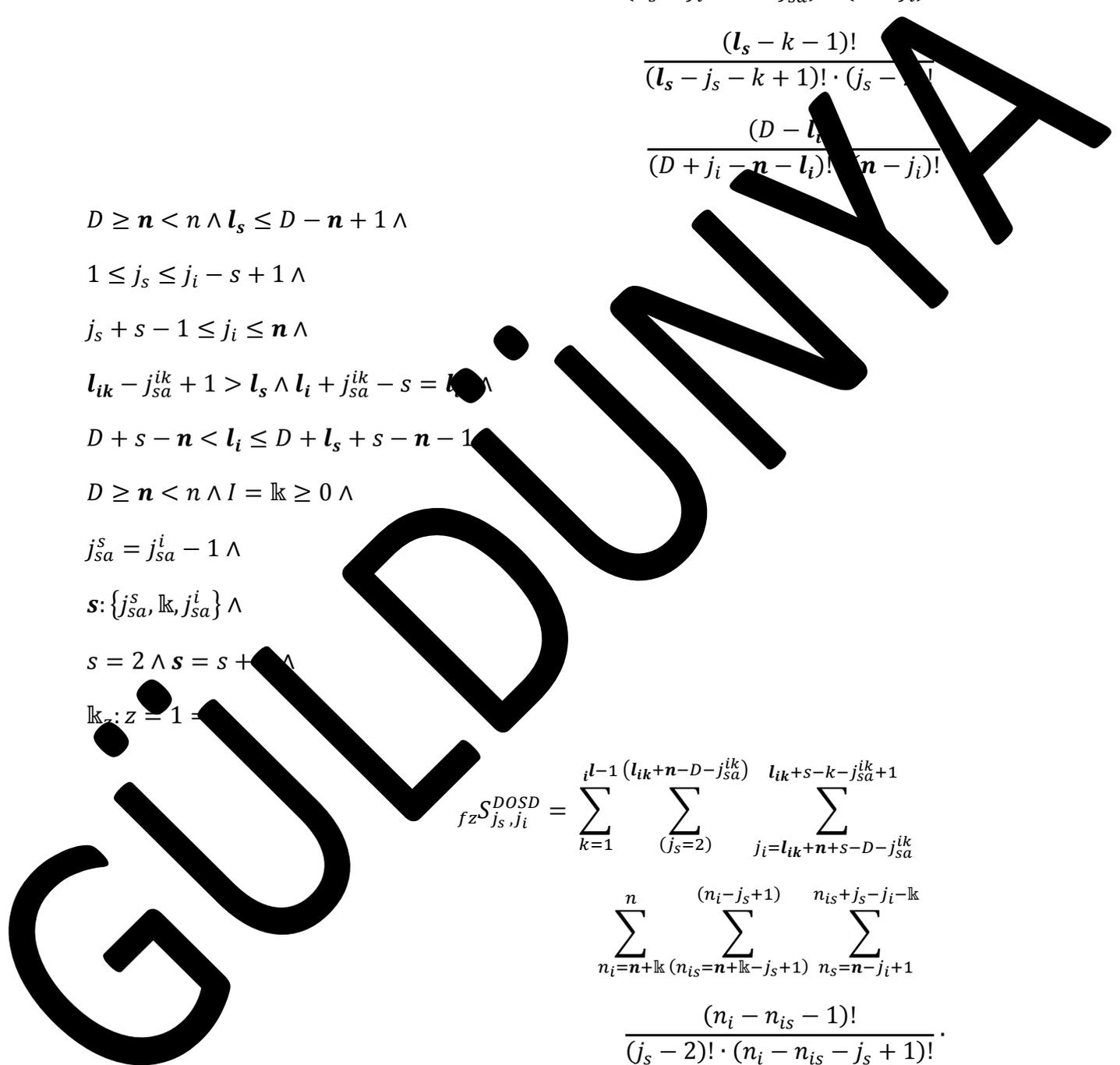
$j_{sa}^s = j_{sa}^i - 1 \wedge$

$s: \{j_{sa}^s, \mathbb{k}, j_{sa}^i\} \wedge$

$s = 2 \wedge s = s + 1 \wedge$

$\mathbb{k}: z = 1 =$

$$fz_{j_s, j_i}^{DOSD} = \sum_{k=1}^{l-1} \sum_{(j_s=2)}^{(l_{ik}+n-D-j_{sa}^{ik})} \sum_{j_i=l_{ik}+n+s-D-j_{sa}^{ik}}^{l_{ik}+s-k-j_{sa}^{ik}+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$



$$\begin{aligned}
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{i-1} \sum_{(j_s=l_{ik}+n-D-j_s^{ik}+1)}^{(l_s-k+1)} \sum_{j_i=l_{ik}+n-k-j_s^{ik}+1}^{l_{ik}+n-k-j_s^{ik}+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s^{ik}+1)}^{(j_s+1)} \sum_{n_s=n-j_i+1}^{i-l_k} \\
 & \frac{(n_i - n_s - 1)!}{(j_s - 1)! \cdot (n_i - n_s - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=i}^{\binom{D}{i}} \sum_{(j_s=1)}^{l_{ik}+s-i-j_s^{ik}+1} \sum_{j_i=l_{ik}+n+s-D-j_s^{ik}}^{l_{ik}+s-i-j_s^{ik}+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_s=n-j_i+1)}^{(n_i-j_i-l_k+1)} \\
 & \frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot
 \end{aligned}$$

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$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_s-k+1)} \sum_{j_i=j_s+s-1}^{(j_s+1)} \sum_{n_i=n+l_s-j_s-1}^{(n+l_s-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_i-j_{sa}^{ik}}^{(n+l_s-j_s-k)} \frac{(n_s - j_{sa}^{ik})!}{(n_s + j_i - n - j_{sa}^{ik})! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

- $((D \geq n < n \wedge l_s \leq D - n + 1$
- $1 \leq j_s \leq j_i - s + 1$
- $j_s + s - 1 \leq j_i \leq n \wedge$
- $l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$
- $l_{ik} \leq D + j_{sa}^{ik} - n) \vee$
- $(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$
- $1 \leq j_s \leq j_i - s + 1 \wedge$
- $j_s + s - 1 \leq j_i \leq n \wedge$
- $l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$
- $l_{ik} \leq D + j_{sa}^{ik} - n) \vee$
- $(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$
- $1 \leq j_s \leq j_i - s + 1 \wedge$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s \leq j_i \leq n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$l_i \leq D + s - n) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa}^s = j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s = 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(j_i-s+1)} \sum_{j_i=s+1}^{l_s+s-k}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\begin{aligned}
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{i-l-1} \sum_{j=2}^{l_s-k+1} \sum_{j_i=l_i-k+1}^{j_i-k+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{n_s=n-j_i+1}^{n-j_s+1} \sum_{j_i=l_k}^{j_i-k} \\
 & \frac{(n_i - n_s - 1)!}{(j_s - 1)! \cdot (n_i - n_s - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=i}^{l_i} \sum_{j_s=1}^{l_i-k+1} \sum_{j_i=s}^{l_i-k+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{n_s=n-j_i+1}^{n_i-j_i-k+1} \\
 & \frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot
 \end{aligned}$$

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$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$\sum_{k=1}^{i-1} \sum_{(j_s=j_i-s+1)}^{()} \sum_{j_i=s+1}^{l_s+s-k}$$

$$\sum_{n_i=n+1}^n \sum_{(j_s+1)}^{(n-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_i-j_{sa}^{ik}}^{()} \sum_{(n_s-j_{sa}^{ik})}^{(n-j_s+1)}$$

$$\frac{(n_s - j_{sa}^{ik})!}{(n_s + j_i - n - j_{sa}^{ik})! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=i}^{()} \sum_{(j_s=1)}^{()} \sum_{j_i=s}$$

$$\sum_{n_i=n+lk}^{()} \sum_{(n_{ik}=n_i+j_{sa}^{ik}-j_s-j_{sa}^{ik}+1)}^{()} \sum_{n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^{ik}}$$

$$\frac{(n_s - j_{sa}^{ik})!}{(n_s + j_i - n - j_{sa}^{ik})! \cdot (n - j_i)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$(l_i \leq D + s - n) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa}^s = j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^i, j_{sa}^i\} \wedge$$

$$s = 2 \wedge s = i + \mathbb{k} \wedge$$

$$\mathbb{k}_z: i - 1 \Rightarrow$$

$$fz S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(l_s-k+1)} \sum_{j_i=j_s+s-1}^{l_i-k+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - 1)!}{(j_s + l_i - j_i - 1)! \cdot (j_i - j_s + 1)!}$$

$$\frac{(n - l_i)!}{(n - j_i - 1)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{i-1} \sum_{(j_s=1)}^{i-k} \sum_{j_i=s}^{i+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_s=n-j_i+1)}^{(n_i-j_i-k+1)}$$

$$\frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$\sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(l_s-k+1)} \sum_{j_i=j_s+s-1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{\binom{()}{n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^{lk}}} \frac{(n_s - j_{sa}^s)!}{(n_s + j_i - n - j_{sa}^s)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{n_i=n+l_k} \sum_{\binom{()}{n_{ik}=n_i+j_{sa}^s-j_{sa}^{ik}+1}} \sum_{\binom{()}{n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^{lk}}} \frac{(n_s - j_{sa}^s)!}{(n_s + j_i - n - j_{sa}^s)! \cdot (n - j_i)!} \cdot \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$\begin{aligned} & ((D \geq n < n \wedge l_s \leq D - n + 1) \vee \\ & 1 \leq j_s \leq j_i - s + 1 \wedge \\ & j_s + s - 1 \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge \\ & (D + s - n < l_i \leq D + j_s + s - n - 1) \vee \\ & (D \geq n < n \wedge l_s \leq D - n + 1 \wedge \\ & 1 \leq j_s \leq j_i - s + 1 \wedge \\ & j_s + s - 1 \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge \\ & (D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1) \vee \\ & (D \geq n < n \wedge l_s \leq D - n + 1 \wedge \\ & 1 \leq j_s \leq j_i - s + 1 \wedge \end{aligned}$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa}^s = j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, k, j_{sa}^i\} \wedge$$

$$s = 2 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$fz S_{j_s, j_i}^{D, D, D} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(j_i-s+1)} \sum_{j_i=l_i+n-D}^{l_s+s-k}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(l_s-k+1)} \sum_{j_i=l_s+s-k+1}^{l_i-k+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-1}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_s - j_i + 1)!} \cdot$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_i + j_s - n_s - j_i)!} \cdot$$

$$\frac{(n_s - j_i - n - 1)!}{(n_s - j_i - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_i - k - 1)!}{(l_i - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s - l_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{i-1} \sum_{(j_s=1)}^{(l_s-k+1)} \sum_{j_i=l_i+n-D}^{l_i-i+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_s=n-j_i+1)}^{(n_i-j_i-k+1)}$$

$$\frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

GÜLDEN

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_i-s+1)}^{()} \sum_{j_i=l_i+n-D}^{l_s+s-k} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{()} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_{sa}^s-k)}^{()} \frac{(n_s+j_{sa}^s-j_{sa}^{ik})!}{(n_s+j_{sa}^s-j_{sa}^{ik}-j_s)! \cdot (j_s-k)!} \cdot \frac{(l_s+k-1)!}{(j_s-k+1)! \cdot (j_s-2)!} \cdot \frac{(D+j_{sa}^s-n-l_i)! \cdot (n-j_i)!}{(D+j_{sa}^s-n-l_i)! \cdot (n-j_i)!}$$

$$((D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$((D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D + s - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + s - n < l_{ik} \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa}^s = j_{sa}^i - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s = 2 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$fz S_{j_s, j_i}^{D, \mathbb{k}} = \sum_{i=1}^{i=l_i+n-D-s} \sum_{(j_s-2)}^{l_i-k+1} \sum_{j_i=l_i+n-D}^{n} \sum_{n_i=n+\mathbb{k}}^{n_i-j_s+1} \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{n_{is}+j_s-j_i-\mathbb{k}} \sum_{n_s=n-j_i+1}^{(n_i - n_{is} - 1)!} \cdot \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{i-1} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)} \sum_{j_i=j_s+s-1}^{l_i-k+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{i_s}+j_s-j_i-l_k}$$

$$\frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!}$$

$$\frac{(n_{i_s} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{i_s} + j_s - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s - 1)!}{(j_s + l_i - l_s - s - 1)! \cdot (j_i - l_i - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{()} \sum_{(j_s=1)}^{l_i - i^{l+1}} \sum_{j_i=l_i+n-D}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_s=n-j_i+1)}^{(n_i-j_i-l_k+1)}$$

$$\frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)} \sum_{j_i=j_s+s-1}$$

GÜLDÜNYA

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik}} \sum_{(n_s = n_{ik} + j_s + j_{sa}^{ik} - j_i - j_{sa}^s)}^{(\quad)}$$

$$\frac{(n_s - j_{sa}^s)!}{(n_s + j_i - n - j_{sa}^s)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_s - k - 1)! \cdot (l_s - 2)!}{(l_s - j_s - 1)! \cdot (l_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_i - s + 1 \wedge$

$j_s + s - 1 \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa}^s = l_{ik} \wedge l_{sa} + j_{sa} - s > 0 \wedge$

$D + s - n < l_i \leq D + l_s + j_{sa} - n - 1 \wedge$

$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$

$j_{sa}^s = j_{sa}^i - 1 \wedge$

$s: \{j_{sa}^s, \mathbb{k}, j_{sa}^{ik}\}$

$s = 2 \wedge s = s + 1$

$\mathbb{k}_z: z = 1 \Rightarrow$

$$f_z^{DOSD}_{j_s, j_i} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(j_i-s+1)} \sum_{j_i = l_i + n - D}^{l_{sa} + s - k - j_{sa} + 1}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_s = n - j_i + 1}^{n_{is} + j_s - j_i - \mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(l_i)!}{(D + j_i - n - l_i)! \cdot (j_i)!} + \sum_{k=1}^{i-1} \sum_{s=2}^{(l_{sa}-k-j_{sa}+2)} \sum_{n_i=n+l_k}^n \sum_{n_s=n+l_k-j_s+1}^{n_{is}+j_s-j_i-l_k} \frac{(n_i - n_{is} - 1)!}{(i - l)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^i \sum_{(j_s=1)}^{()} \sum_{j_i=l_i+n-D}^{l_i-i+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_s=n-j_i+1)}^{(n_i-j_i-l_k+1)}$$

GÜLDÜZMAYA

$$\frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \binom{D+l_s+s-n-l_i}{(j_s=j_i+k+1)} \sum_{j_i=l_i+n-k}^{l_{sa}+s-j_{sa}+1} \binom{l_{sa}+s-j_{sa}+1}{j_i=l_i+n-k}$$

$$\sum_{n_i=n+l_k}^n \binom{n}{n_i=n+l_k} \sum_{j_s=j_i+k}^{(n_i-j_s+1)} \binom{(n_i-j_s+1)}{j_s=j_i+k}$$

$$\sum_{n_i=n+l_k} \binom{D+l_s+s-n-l_i}{(j_s=j_i+k+1)} \sum_{j_i=l_i+n-k}^{l_{sa}+s-j_{sa}+1} \binom{l_{sa}+s-j_{sa}+1}{j_i=l_i+n-k}$$

$$\frac{(n_s - j_{sa}^s)!}{(n_s + j_i - n - j_{sa}^s)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1$$

$$1 \leq j_s \leq j_s - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i$$

$$l_{ik} - j_{sa}^{ik} + j_{sa}^{ik} = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n - l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa}^s = j_{sa}^l - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}^l\} \wedge$$

$$s = 2 \wedge s = s + \mathbb{k} \wedge$$

$$lk_z: z = 1 \Rightarrow$$

$$fzS_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(l_i+n-D-s)} \sum_{j_i=l_i+n-D}^{l_i-k+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-l_k}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{i-1} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{sa}-k-j_{sa}+2)} \sum_{j_i=j_s+s-1}^{l_i-k+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-l_k}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

GÜLDÜMÜYA

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{l_i} \sum_{(j_s=1)}^{l_i - i + 1} \sum_{j_i=l_i+n-l_s}^{l_i - i + 1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(j_i=l_k+1)}^{(j_i=l_k+1)}$$

$$\frac{(n_s - n_s - 1)!}{(i - 2)! \cdot (n_s - j_i + 1)!} \cdot$$

$$\frac{(n_s - n - 1)!}{(n - j_i)!} \cdot$$

$$\frac{(l_i - l_s - s + 1)!}{(j_i - j_i - l_s + 1)! \cdot (j_i - s)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{sa}-k-j_{sa}+2)} \sum_{j_i=j_s+s-1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-l_k)}$$

$$\frac{(n_s - j_{sa}^s)!}{(n_s + j_i - n - j_{sa}^s)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa}^s = j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, k, j_{sa}^i\} \wedge$$

$$s = 2 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$f_z^{SD} = \sum_{k=1}^l \sum_{j_s=1}^{j_i-s+1} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{ik}-k-j_{sa}^{ik}+1} \sum_{n_i=n+k}^n \sum_{n_s=n+k-j_s+1}^{(n_i-j_s)} \sum_{n_s=n-j_i+1}^{n_i+j_s-j_i-k} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{l-1} \sum_{j_s=2}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j_i=l_{ik}+s-k-j_{sa}^{ik}+2}^{l_{sa}+s-k-j_{sa}+1}$$

$$\begin{aligned}
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - l_s - i - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{i=1}^{(j_s-1)} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{sa}+s-i-l-j_{sa}+1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_s=n-j_i+1)}^{(n_i-j_i-k+1)} \\
 & \frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -
 \end{aligned}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_i-s+1)}^{(j_s-1)} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{ik}+s-k-j_{sa}^{ik}+1}$$

GÜLDENWA

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s)}^{(\quad)}$$

$$\frac{(n_s - j_{sa}^s)!}{(n_s + j_i - n - j_{sa}^s)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)! \cdot (l_s - 2)!}{(l_s - j_s - 1)! \cdot (l_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_{sa} + j_{sa} - s = \dots \wedge$$

$$D + s - n < l_i \leq D + l_s + \dots - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa}^s = j_{sa}^i - 1 \wedge$$

$$s: (j_{sa}^s, \mathbb{k}, j_{sa}^{ik})$$

$$s = 2 \wedge s = s + 1$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(l_{sa}+n-D-j_{sa})} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{sa}+s-k-j_{sa}+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(l_i)!}{(D + j_i - n - l_i)! \cdot (j_i)!} + \sum_{k=1}^{i-1} \sum_{j_s=l_{sa}-D-j_{sa}}^{l_{ik}-k-j_{sa}^{ik}+2} \sum_{j_i=l_{sa}+s-k-j_{sa}+1}^{l_{sa}+s-k-j_{sa}+1} \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{i-1} \sum_{j_s=1}^{l_{sa}+s-i-l-j_{sa}+1} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{sa}+s-i-l-j_{sa}+1} \sum_{n_i=n+l_k}^n \sum_{n_s=n+l_k-j_s+1}^{n_{is}+j_s-j_i-l_k} \frac{(n_i - n_{is} - 1)!}{(i - l)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{i-1} \sum_{j_s=1}^{l_{sa}+s-i-l-j_{sa}+1} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{sa}+s-i-l-j_{sa}+1} \sum_{n_i=n+l_k}^n \sum_{n_s=n-j_i+1}^{(n_i-j_i-l_k+1)}$$

GÜLDENSA

$$\frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \binom{l_{ik}-k-1}{j_s=l_{sa}+n-l_i-k} \binom{l_i-k-1}{j_i=j_s+1}$$

$$\sum_{n_i=n+l_k}^n \binom{n_i-j_s+1}{n_i-l_s-k} \binom{n_i-j_s+1}{j_s+1}$$

$$\sum_{n_{is}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \binom{()}{n_{is}=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-k}$$

$$\frac{(n_s - j_{sa}^s)!}{(n_s + j_i - n - j_{sa}^s)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + j_{sa}^{ik} = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$l_{sa} < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa}^s = j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s = 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned}
& \sum_{(j_s=2)}^{i^{l-1} \binom{s+1}{j_s}} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_s+s-k} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \\
& \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \\
& \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +
\end{aligned}$$

$$\begin{aligned}
 & \sum_{k=1}^{i^l-1} \sum_{(j_s=2)}^{(l_s-k+1)} \sum_{j_i=l_s+s-k-j_{sa}+1}^{l_{sa}+s-k-j_{sa}+1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i}^{n_{is}+j_s-j_i-k} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l_i - k + 1)!}{(l_s - l_i - s + 1)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=i^l}^{()} \sum_{(j_s=1)}^{l_{sa}+s-i^l-j_{sa}+1} \sum_{j_i=l_{sa}+n+s-D-j_{sa}} \\
 & \sum_{n_i=n+k}^n \sum_{(n_s=n-j_i+1)}^{(n_i-j_i-k+1)} \\
 & \frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -
 \end{aligned}$$

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$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_i-s+1)}^{(\quad)} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_s+s-k} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{(\quad)} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_{sa}^s-k)}^{(\quad)} \frac{(n_s+j_{sa}^s)!}{(n_s+j_{sa}^s-k)! \cdot (j_s-k)!} \cdot \frac{(l_s+k-1)!}{(j_s-k+1)! \cdot (j_s-2)!} \cdot \frac{(D+j_{sa}^s-n-l_i)!}{(D+j_{sa}^s-n-l_i)! \cdot (n-j_i)!}$$

$((D \geq n < n \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_i - s + 1 \wedge$

$j_s + s - 1 \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$

$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_i - s + 1 \wedge$

$j_s + s - 1 \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$

$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_i - s + 1 \wedge$

$j_s + s - 1 \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$D + s - n < l_i \leq D + l_s + s - n - 1) \wedge$

$$D \geq n < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa}^s = j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s = 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(l_{sa}+n-D-j_{sa})} \frac{l_{sa}+s-k-j_{sa}+1}{(j_s-2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_i - j_s + 1)}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_{is} - 1)!}{(n_s - 1)!} \cdot \frac{(n_s - 1)!}{(j_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{i-1} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_s-k-1)} \sum_{j_i=j_s+s-1}^{l_{sa}+s-k-j_{sa}+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

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$$\begin{aligned}
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{j_s=l_{sa}+n-D-j_{sa}+1}^{(n_s - l_s - i) - j_s + 1} \sum_{n_i=n+lk}^n \sum_{n_{is}=n+lk-j_s+1}^{(n_i - j_i - lk + 1)} \\
 & \frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_s-k-1)} \sum_{j_i=j_s+s-1}^{(n_i - j_s + 1)} \sum_{n_i=n+lk}^n \sum_{(n_{is}=n+lk-j_s+1)}^{(n_i - j_s + 1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s - j_{sa}^{ik}}^{(n_s - j_{sa}^s)} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik} - j_i - j_{sa}^s - lk)}^{(n_s - j_{sa}^s)} \\
 & \frac{(n_s - j_{sa}^s)!}{(n_s + j_i - n - j_{sa}^s)! \cdot (n - j_i)!} \cdot
 \end{aligned}$$

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$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}^i\}$$

$$s > 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned} & \sum_{k=1}^{n+1} \sum_{(j_s - l_{ik} + n - D - j_{sa}^{ik} + 1)}^{(j_i - 1)} \sum_{j_i = l_i + n - D}^{l_{ik} + s - k - j_{sa}^{ik} + 1} \\ & \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_s = n - j_i + 1}^{n_{is} + j_s - j_i - \mathbb{k}} \\ & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!} \\ & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \\ & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \end{aligned}$$

$$\begin{aligned}
 & \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j_i=l_{ik}+s-k-j_{sa}^{ik}+2}^{l_i-k+1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i-k}^{n_{is}+j_s-j_i-k} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - k - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n - k)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_s - l_s)! \cdot (l_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \\
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_i-s+1)}^{()} \sum_{j_i=l_i+n-D}^{l_{ik}+s-k-j_{sa}^{ik}+1} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^n \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-k)}^{(n_i-j_s+1)} \\
 & \frac{(n_s - j_{sa}^s)!}{(n_s + j_i - n - j_{sa}^s)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k, j_{sa}^i\} \wedge$$

$$s > 2 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$fz_{j_s, j_i}^{DOSD} = \sum_{k=1}^{D-n+1} \sum_{\substack{(l_i+n-k) \\ (l_{ik}+n-k)}} \sum_{\substack{l_i-k+1 \\ l_i+n-D}} \\ \sum_{n_i=n+k}^n \sum_{\substack{(n_i-j_s+1) \\ (n_i=n+k-j_s+1)}} \sum_{\substack{n_{is}+j_s-j_i-k \\ n_s=n-j_i+1}} \\ \frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - k - 1)!}{(j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - k)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\ \sum_{k=1}^{D-n+1} \sum_{\substack{(l_{ik}-k-j_{sa}^{ik}+2) \\ (j_s=l_i+n-D-s+1)}} \sum_{\substack{l_i-k+1 \\ j_i=j_s+s-1}} \\ \sum_{n_i=n+k}^n \sum_{\substack{(n_i-j_s+1) \\ (n_i=n+k-j_s+1)}} \sum_{\substack{n_{is}+j_s-j_i-k \\ n_s=n-j_i+1}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - 1)!}{(j_s + l_i - j_i - 1)! \cdot (j_i - j_s + 1)!} \cdot \frac{(n - l_i)!}{(n - j_i - 1)! \cdot (n - j_i)!} \sum_{k=1}^{+s-n-l_i} \sum_{(j_s=l_i+k)}^{(l_i-k-j_{sa})} \sum_{j_i=j_s+s-1}^{(j_s+s+1)} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{k=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{()} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-\mathbb{k})}^{()} \frac{(n_s - j_{sa}^s)!}{(n_s + j_i - n - j_{sa}^s)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge j_i - s + 1 \wedge j_s + s - 1 \leq j_i \leq n \wedge l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s > 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$fz^D_{j_s, j_i}^{DOSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(j_i-s+1)} \sum_{j_i=l_{ik}+l_s-D-j_{sa}^{ik}}^{l_s+s-k} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_i+1)} \sum_{n_s=n-j_i+1}^{n_{is}-j_i-\mathbb{k}} \frac{(n_i-j_i-1)!}{(j_i-j_s-1)! \cdot (n_{is}-j_s-n_s-j_i-\mathbb{k})!} \cdot \frac{(n_{is}-j_i-\mathbb{k}-1)!}{(n_s-1)!} \cdot \frac{(n_s-1)!}{(n_s-j_i-n-1)! \cdot (n-j_i)!} \cdot \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \frac{(l_i-l_s-s+1)!}{(j_s+l_i-j_i-l_s)! \cdot (j_i-j_s-s+1)!} \cdot \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)} \sum_{j_i=l_s+s-k+1}^{l_{ik}+s-k-j_{sa}^{ik}+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}} \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_s-\mathbb{k}-1)!}{(j_i-j_s-1)! \cdot (n_{is}+j_s-n_s-j_i-\mathbb{k})!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s - 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{j_s=j_i-s}^{()} \sum_{j_i=l_{ik}+n+s-D-k}^{l_s+s} \sum_{n_i=n+k}^n \sum_{n_{is}=n_{is}+j_s+1}^{(n_i-j_s+1)} \sum_{n_{is}=n_{is}+j_{sa}^{ik}-j_{sa}^s}^{()} \sum_{n_{is}=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-k}^{()} \frac{(n_s - j_{sa}^s)!}{(n_s + j_i - n - j_{sa}^s)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq 1 \wedge n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_s - s + 1 \wedge$$

$$j_s + 1 \leq j_i -$$

$$l_{ik} - j_{sa}^{ik} + > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$> n - \wedge I = k > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k, j_{sa}^i\} \wedge$$

$$s > 2 \wedge s = s + k \wedge$$

$\mathbb{k}_z: z = 1 \Rightarrow$

$$\begin{aligned}
 f_z S_{j_s, j_i}^{DOSD} &= \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_{ik}+n-D-j_{s_a}^{ik})} \sum_{j_i=l_{ik}+n+s-D-j_{s_a}^{ik}}^{l_{ik}+s-k-j_{s_a}^{ik}+1} \\
 &\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}} \\
 &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \\
 &\frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!} \\
 &\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 &\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \\
 &\frac{(l_i + l_s - s + 1)!}{(l_i + l_s - s + 1)! \cdot (j_i - j_s - s + 1)!} \\
 &\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 &\sum_{k=1}^{n+1} \sum_{(j_s=l_{ik}+n-D-j_{s_a}^{ik}+1)}^{(l_s-k+1)} \sum_{j_i=j_s+s-1}^{l_{ik}+s-k-j_{s_a}^{ik}+1} \\
 &\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}} \\
 &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \\
 &\frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!} \\
 &\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 &\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}
 \end{aligned}$$

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$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_s-k+1)} \sum_{j_i=j_s+s-1}^{n}$$

$$\sum_{n_i=n+l_s-j_s+1}^{n} \sum_{j_s+1}^{(n-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_i-j_{sa}^{ik}} \sum_{(n+l_s-j_s+1)}^{(n-j_s+1)}$$

$$\frac{(n_s - j_{sa}^{ik})!}{(n_s + j_i - n - j_{sa}^{ik})! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1$$

$$2 \leq j_s \leq j_i - s + 1$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$(l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$(l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik}) \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k, j_{sa}^i\} \wedge$$

$$s > 2 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$fz S_{j_s j_i}^{DOSD} = \sum_{k=1}^{D-n+1} \sum_{\substack{(j_s-s+1) \\ (j_s+n-D) \\ j_i=l_i+s-k}} \frac{(n_i-j_s+1) \cdot (n_{is}+j_s-j_i-k)}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_s-k-1)!}{(j_i-l_i-1)! \cdot (n_{is}+j_s-n_s-j_i-k)!} \cdot \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \frac{(l_i-l_s-s+1)!}{(j_s+l_i-j_i-l_s)! \cdot (j_i-j_s-s+1)!} \cdot \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \sum_{k=1}^{D-n+1} \sum_{\substack{(l_s-k+1) \\ (j_s=l_s+n-D) \\ j_i=l_s+s-k+1}} \sum_{\substack{(n_i-j_s+1) \\ (n_{is}=n+k-j_s+1) \\ n_s=n-j_i+1}} \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!}$$

$$\frac{(n_{is} - n_s - k - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - k)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(l_i)!}{(D + j_i - n - l_i)! \cdot (j_i)!}$$

$$\sum_{n_i=n+1}^{D+l_s+s-n-l_i} \sum_{n_{is}=n+k-j_s+1}^{l_s+s-n} \binom{l_s+s-n}{n_{is}=n+k-j_s+1} \binom{n}{n_i=n+1}$$

$$\sum_{i_k=n_{is}+j_{sa}^{ik} - j_{sa}^{ik} (n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-k)}$$

$$\frac{(n_s - j_{sa}^s)!}{(n_s + j_i - n - j_{sa}^s)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik})) \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k, j_{sa}^i\} \wedge$$

$$s > 2 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, j_i}^{DOSD} = \sum_{j_s=l_s+n-D}^{D-n+1} \sum_{j_i=l_i+n-D}^{l_i-k+1} \sum_{n_i=n+k}^n \sum_{n_{is}=n+k-j_s+1}^{n_i-j_s+1} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - k - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - k)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{D-n+1} \sum_{j_s=l_i+n-D-s+1}^{(l_s-k+1)} \sum_{j_i=j_s+s-1}^{l_i-k+1}$$

$$\begin{aligned}
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - 1)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_s - s - 1)!}{(j_s + l_i - n - l_s - j_i - s + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{i=1}^{D+l_s+s-n-l_i} \sum_{k=1}^{(l_s-k+1)} \sum_{j_i=l_i+n-D-s+1}^{j_i=j_s+s-1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-\mathbb{k})} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-\mathbb{k})}^{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-\mathbb{k})} \\
& \frac{(n_s - j_{sa}^s)!}{(n_s + j_i - n - j_{sa}^s)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
\end{aligned}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k, j_{sa}^i\} \wedge$$

$$s > 2 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$f_z^{DOSD} S_{j_s, j_i} = \sum_{k=1}^{D-n+1} \sum_{j_s=l_{sa}+n-D-j_{sa}+1}^{(j_i-s+1)} \sum_{j_i=l_{sa}+s-k-j_{sa}+2}^{l_{sa}+s-k-j_{sa}+1} \sum_{n_i=n+k}^n \sum_{n_{is}=n+k-j_s+1}^{(n_i-j_s)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - k - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - k)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{D-n+1} \sum_{j_s=l_{sa}+n-D-j_{sa}+1}^{(l_{sa}-k-j_{sa}+2)} \sum_{j_i=l_{sa}+s-k-j_{sa}+2}^{l_i-k+1} \sum_{n_i=n+k}^n \sum_{n_{is}=n+k-j_s+1}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

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$$\frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!} \cdot$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot$$

$$\frac{(l_i)!}{(D + j_i - n - l_i)! \cdot (j_i)!} \cdot$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_i)}^{(l_s)} \sum_{j_i=n-D}^{l_{sa}+s-k-j_{sa}} \sum_{n_i=n+1}^n \sum_{n_{is}=n+\mathbb{k}-j_s+1}^{(n_i-j_s+1)}$$

$$\sum_{i_{ik}=n_{is}+j_{sa}-j_{sa}^{ik}}^{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}-\mathbb{k})}$$

$$\frac{(n_s - j_{sa}^s)!}{(n_s + j_i - n - j_{sa}^s)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n) \wedge l_s > D - n + 1 \wedge$$

$$D > n < n) \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s > 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_i+n-D-s)} \sum_{j_i=l_i+n-l_s-k+1}^{l_i-k+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - j_i - \mathbb{k})!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{D-n+1} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{sa}-k-j_{sa}+2)} \sum_{j_i=j_s+s-1}^{l_i-k+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

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$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{sa}-k-j_{sa}+2)} \sum_{j_{sa}+s-1}^{n} \sum_{n_i=n}^{n} \sum_{(n_{is}=n+k-j_s+1)}^{n} \sum_{(n_{ik}=n_{is}-j_{sa}^{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^{ik})}^{n} \frac{(n_s - j_{sa}^s)!}{(n_s + j_{sa}^s - n - j_{sa}^s)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_i > D - l_s + 1 \wedge$

$2 \leq j_s \leq j_i - s + 1 \wedge$

$j_s + s - 1 \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + j_s - l_s \wedge l_s \wedge j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$D > l_i < n \wedge I = \mathbb{K} > 0 \wedge$

$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$

$s \in \{j_s, \mathbb{K}, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{K}, j_{sa}^i\} \wedge$

$s > 2 \wedge s = s + \mathbb{K} \wedge$

$\mathbb{K}_z: z = 1 \Rightarrow$

$$\begin{aligned}
 f_z S_{j_s, j_i}^{DOSD} = & \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(j_i-s+1)} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{ik}+s-k-j_{sa}^{ik}+1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i-k}^{n_{is}+j_s-j_i-k} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - k - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - k)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j_i=l_{ik}+s-k-j_{sa}^{ik}+1}^{l_{sa}+s-k-j_{sa}^{ik}+1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - k - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - k)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot
 \end{aligned}$$

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$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_i-s+1)}^{(\)} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{ik}+s-k-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{is}-j_{sa}^{ik}}^{(\)} \sum_{(n_{ik}+j_s+j_{sa}^{ik}-j_{sa}^{is}-k)}^{(\)}$$

$$\frac{(n_{is}-j_{sa}^{is})!}{(n - j_{sa}^{is})! \cdot (n - j_i)!}$$

$$\frac{(l_s - k)!}{(l_s - j_{sa}^{is} - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{is} + k = l_s \wedge l_{ik} + j_{sa}^{ik} - j_{sa}^{is} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge l_s > 0 \wedge$$

$$j_{sa}^{is} = j_s - 1 \wedge j_{sa}^{is} \leq j_s - 1 \wedge$$

$$S: \{j_{sa}^s, \dots, j_{sa}^i\} \vee S: \{j_{sa}^i, \dots, j_{sa}^k, j_{sa}^i\} \wedge$$

$$s > i = s + k \wedge$$

$$k_z: z = 1 =$$

$$f_z^{DOSD} S_{j_s, j_i} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_{sa}+n-D-j_{sa})} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{sa}+s-k-j_{sa}+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j_i=j_s+s-1}^{j_{sa}+1}$$

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$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s)}^{(\quad)}$$

$$\frac{(n_s - j_{sa}^s)!}{(n_s + j_i - n - j_{sa}^s)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - \dots)!}{(l_s - j_s - \dots)! \cdot (\dots - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - \dots - l_i)! \cdot (n - j_i)!}$$

$((D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq j_s \leq j_i - s + 1 \wedge$

$j_s + s - 1 \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_i > l_{ik} \wedge l_i + j_{sa} - s = \dots) \vee$

$(D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq j_s \leq j_i - s + 1 \wedge$

$j_s + s - 1 \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$

$(D > n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq j_s \leq j_i - s + 1 \wedge$

$j_s + s - 1 \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \wedge$

$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}^i\} \wedge$

$s > 2 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 1 \Rightarrow$

$$\begin{aligned}
fz S_{j_s, j_i}^{DOSD} = & \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(j_i-s+1)} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_s+s-k} \\
& \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_s - k - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - k)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - j_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D - l_i - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)} \sum_{j_i=l_{sa}+s-k-j_{sa}+1}^{l_{sa}+s-k-j_{sa}+1} \\
& \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_s - k - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - k)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot
\end{aligned}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_i-s+1)}^{(\)} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_s+s-k} \sum_{n_i=n+k}^n \sum_{(n_{is}+k-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{ik}+j_s+j_{sa}^{ik}-k)}^{(\)} \frac{(n_{is}+j_{sa}^s)!}{(n_{is}+j_{sa}^s)! \cdot (n - j_i)!} \cdot \frac{(l_s - n_{ik} - k + 1)! \cdot (j_s - 2)!}{(l_s - n_{ik} - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(n - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \wedge$$

$$D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s > 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_{sa}+n-D-j_{sa})} \sum_{j_i=l_{sa}+s-k-j_{sa}+1}^{(l_{sa}+s-k-j_{sa}+1)} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j+1)} \sum_{n_s=n-j_i+1}^{(n_{is}+j_s-j_i-\mathbb{k})}$$

$$\frac{(n_i - j - 1)!}{(n_i - j_s + 1)!} \cdot \frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!}$$

$$\frac{(n_s - 1)!}{(n_s - j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{D-n+1} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_s-k-1)} \sum_{j_i=j_s+s-1}^{(l_{sa}+s-k-j_{sa}+1)} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{(n_{is}+j_s-j_i-\mathbb{k})}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!}$$

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$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s - 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{j_s=l_{sa}+k}^{(l_s-l_i)-j_{sa}+1} \sum_{j_i=j_s+1}^n \sum_{n_i=n+l_k}^{(n_i-j_s+1)} \sum_{j_{sa}=n_{is}+j_{sa}^s-j_{sa}^{lk}}^{(n_i-j_s+1)} \sum_{j_{sa}=n_{ik}+j_s+j_{sa}^{lk}-j_i-j_{sa}^{-lk}}^{(n_i-j_s+1)} \frac{(n_s - j_{sa}^s)!}{(n_s + j_i - n - j_{sa}^s)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_s - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i$$

$$l_{ik} - j_{sa}^{ik} + j_{sa}^s = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$l_i \leq D + j_i - n \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s > 2 \wedge s = s + \mathbb{k} \wedge$$

$\mathbb{k}_z: z = 1 \Rightarrow$

$$\begin{aligned}
 f_z S_{j_s, j_i}^{DOSD} &= \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(j_i-s+1)} \sum_{j_i=s+1}^{l_{ik+s-k-j_{sa}^{ik}+1}} \\
 &\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}} \\
 &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \\
 &\frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!} \\
 &\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 &\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \\
 &\frac{(n_i - l_s - s + 1)!}{(n_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \\
 &\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 &\sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(l_{ik-k-j_{sa}^{ik}+2})} \sum_{j_i=l_{ik+s-k-j_{sa}^{ik}+2}}^{l_i-k+1} \\
 &\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}} \\
 &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \\
 &\frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!} \\
 &\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 &\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}
 \end{aligned}$$

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$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=i}^{l_i} \sum_{(j_s=1)}^{l_i - i^{l+1}} \sum_{j_i=s}$$

$$\sum_{n_i=n}^n \sum_{(j_i=k+1)}^{(j_i-k+1)}$$

$$\frac{(n_i - j_i - k - 1)!}{(j_i - 2)! \cdot (n_i - j_i - k + 1)!} \cdot$$

$$\frac{(n_s - j_s - n - 1)! \cdot (n - j_i)!}{(l_i - l_s - s + 1)! \cdot (j_i - s)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - s)!} -$$

$$\sum_{k=1}^{i^{l-1}} \sum_{(j_s=j_i-s+1)}^{l_{ik+s-k-j_{sa}^k+1}} \sum_{j_i=s+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_i=n+k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik} \ (n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-k)}^{()}$$

$$\frac{(n_s - j_{sa}^s)!}{(n_s + j_i - n - j_{sa}^s)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

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$$\sum_{k=1}^n \sum_{l=1}^{()} \sum_{j_i=s}^{()} \sum_{n_i=n+l}^n \sum_{n_s=n+l}^n \sum_{n_s=n+l}^n \frac{(n_s - j_{sa}^s)!}{(n_s + j_i - n - j_{sa}^s)! \cdot (n - j_i)!} \cdot \frac{(D - l_i)}{(D + s - n - j_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l_i \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^s, \dots, k, j_{sa}^i\} \vee s: \{j_{sa}^s, j_{sa}^{ik}, k, j_{sa}^i\} \wedge$$

$$s > 2 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$f_z^{DOSD}_{j_s, j_i} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j_i=j_s+s-1}^{l_i-k+1} \sum_{n_i=n+l}^n \sum_{(n_{is}=n+l-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - k - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - k)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{l_i - l_s + 1} \sum_{(j_s=1)}^{(l_i - l_s + 1)} \sum_{(i=s)}^{(l_i - l_s + 1)} \sum_{n_i=n+l_k}^n \sum_{(n_s=n-j_i+1)}^{(n_i - j_s + 1)} \frac{(n_i - l_s - k)!}{(n_i - n_s - j_i - k + 1)!} \cdot \frac{(n_s - j_i - n - 1)! \cdot (n - j_i)!}{(n_s - l_s - s + 1)! \cdot (j_i - j_s - s)!} \cdot \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!} - \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(l_{ik} - k - j_{sa}^{ik} + 2)} \sum_{j_i=j_s+s-1}^{(n_i - j_s + 1)} \sum_{n_i=n+l_k}^n \sum_{(n_s=n+l_k-j_s+1)}^{(n_i - j_s + 1)} \sum_{n_{ik}=n_{is}+j_{sa}^s - j_{sa}^{ik}}^{()} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s - l_k)}^{()} \frac{(n_s - j_{sa}^s)!}{(n_s + j_i - n - j_{sa}^s)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

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$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \sum_{k=1}^{()} \sum_{(j_s=1)}^{()} \sum_{j_i=s}^{()} \sum_{n_i=n+k}^n \sum_{(n_{ik}=n_i+j_{sa}^s-j_s-j_{sa}^{ik}+1)}^{()} \sum_{n_s=n_{ik}+j_s+j_{sa}^s-j_i-j_{sa}^s-k}^{()} \frac{(n - j_{sa}^s)!}{(n_s + j_i - n - j_s - 1)! \cdot (n - j_i)!} \cdot \frac{(D - l_i)!}{(D + s - j_s - l_i)! \cdot (n - j_s)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_i \wedge$$

$$D + s - n < l_i \leq D + l_s - n - 1 \wedge$$

$$D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa}^{ik} - 1 \wedge$$

$$s \in \{j_{sa}^s, \dots, k, j_{sa}^s\} \vee s \in \{j_{sa}^s, \dots, j_{sa}^{ik}, k, j_{sa}^i\} \wedge$$

$$s > 2 \wedge s = s + k$$

$$k_z: z = \dots \Rightarrow$$

$$f_z^{DOSD}_{j_s, j_i} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(j_i-s+1)} \sum_{j_i=l_i+n-D}^{l_{ik}+s-k-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{i_s} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{i_s} + j_s - n_s - j_i - \mathbb{k})!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 1)!} \cdot$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot$$

$$\frac{(l_i)!}{(D + j_i - n - l_i)! \cdot (j_i)!} +$$

$$\sum_{k=1}^{i-1} \sum_{s=2}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j_i=n+lk}^{l_i-k+1} \sum_{n_i=n+lk}^{n_{i_s}+j_s-j_i-k} \sum_{n_s=n-j_i+1}^{n_{i_s}+j_s-j_i-k}$$

$$\frac{(n_i - n_{i_s} - 1)!}{(i - l)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot$$

$$\frac{(n_{i_s} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{i_s} + j_s - n_s - j_i - \mathbb{k})!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{i-1} \sum_{j_s=1}^{()} \sum_{j_i=l_i+n-D}^{l_i-i^{l+1}}$$

$$\sum_{n_i=n+lk}^n \sum_{n_s=n-j_i+1}^{(n_i-j_i-k+1)}$$

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$$\frac{(n_i - n_s - \mathbb{k} - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i - \mathbb{k} + 1)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_i-k+1)}^{(l_i+l_s+s-j_i^{ik}+1)} \sum_{j_i=l_i+n-k}^n \sum_{n_i=n+\mathbb{k}}^{(n_i-j_s+1)} \sum_{(n_s=n+\mathbb{k})}^{(n_s-j_s+1)} \sum_{i=n_i+j_{sa}^s-j_{sa}^{ik}}^{(i=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-\mathbb{k})} \frac{(n_s - j_{sa}^s)!}{(n_s + j_i - n - j_{sa}^s)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + 1 \leq j_i - s$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$l_i + s - 1 < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

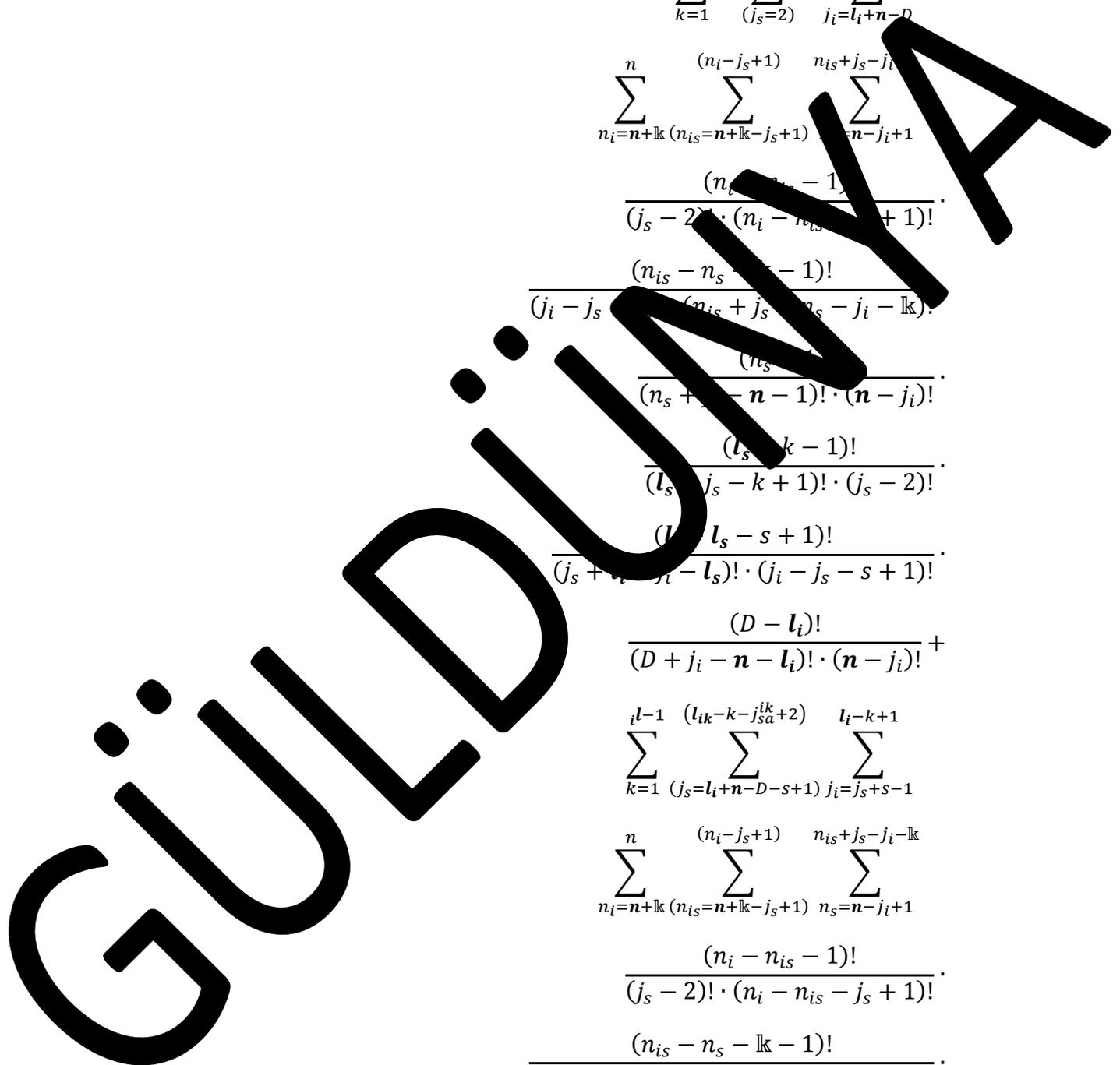
$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}^i\} \wedge$$

$s > 2 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 1 \Rightarrow$

$$fz S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(l_i+n-D-s)} \sum_{j_i=l_i+n-D}^{l_i-k+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s) \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s + j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_s - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{i-1} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{ik}-k-j_{s\bar{a}}^{\mathbb{k}}+2)} \sum_{j_i=j_s+s-1}^{l_i-k+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$



$$\begin{aligned}
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{(j_s - 1)} \sum_{(j_s=1)}^{(l_i - i + 1)} \sum_{j_i=n-D}^{(n - j_s + 1)} \\
 & \sum_{n_i=n+k}^n \sum_{(n_s=n-j_i+1)}^{(n_i - j_s + 1)} \\
 & \frac{(n_i - l_s - k - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i - k + 1)!} \cdot \\
 & \frac{(n_s + j_i - n - 1)! \cdot (n - j_i)!}{(l_i - l_s - s + 1)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_i - l_s + 1)! \cdot (j_i - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} - \\
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j_i=j_s+s-1}^{(n_i-j_s+1)} \\
 & \sum_{n_i=n+k}^n \sum_{(n_s=n+k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{(j_s-1)} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-k)}^{(n_s-j_{sa}^s)!} \\
 & \frac{(n_s - j_{sa}^s)!}{(n_s + j_i - n - j_{sa}^s)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot
 \end{aligned}$$

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$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s > 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_{z \rightarrow j}^{QSD} = \sum_{k=1}^{l-s+1} \sum_{j_s=2}^{l_s+s-k} \sum_{j_i=l_{ik}+n+s-D-j_{sa}^{ik}}^{l_s+s-k}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\begin{aligned}
 & \sum_{k=1}^{i^{l-1} (l_s - k + 1)} \sum_{(j_s=2)}^{l_{ik+s-k} - j_s^{ik} + 1} \sum_{j_i=l_s+s-k+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i}^{n_{is}+j_s-j_i-l_k} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - l_k - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - l_k)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l_i - k + 1)!}{(l_s - l_i - s + 1)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=i^l}^{(i^l)} \sum_{(j_s=1)}^{l_{ik+s} - i^l - j_s^{ik} + 1} \sum_{j_i=l_{ik}+n+s-D-j_s^{ik}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_s=n-j_i+1)}^{(n_i-j_i-l_k+1)} \\
 & \frac{(n_i - n_s - l_k - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i - l_k + 1)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -
 \end{aligned}$$

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$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_i-s+1)}^{(\cdot)} \sum_{j_i=l_{ik}+n+s-D-j_{sa}^{ik}}^{l_s+s-k} \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{(\cdot)} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_{sa}^{lk})}^{(\cdot)} \frac{(n_s+j_{sa}^s)!}{(n_s+j_{sa}^s-j_{sa}^{lk})! \cdot (j_i)!} \cdot \frac{(l_s+k-1)!}{(l_s-k+1)! \cdot (j_s-2)!} \cdot \frac{(D-j_s+1)!}{(D+j_s-n-l_i)! \cdot (n-j_i)!}$$

$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$
 $1 \leq j_s \leq j_i - s + 1 \wedge$
 $j_s + s - 1 \leq j_i \leq n \wedge$
 $l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - j_{sa}^{lk} = l_{ik} \wedge$
 $D + s - n < l_i \leq l_i + l_s + s - n - 1 \wedge$
 $D > n < n \wedge l_s = l_k > 0$
 $j_{sa}^{ik} - j_{sa}^l - 1 \wedge j_{sa}^s - j_{sa}^{ik} - 1$
 $s: \{j_{sa}^s, l_k, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, l_k, j_{sa}^i\} \wedge$
 $s > 2 \wedge s = l_k \wedge$
 $l_k = \dots$

$$fz_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(l_{ik}+n-D-j_{sa}^{ik})} \sum_{j_i=l_{ik}+n+s-D-j_{sa}^{ik}}^{l_{ik}+s-k-j_{sa}^{ik}+1} \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-l_k}$$

$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{l_i - l_s - s + 1} \sum_{j_s = n - D - j_{sa}^{ik} + 1}^{n - D - j_{sa}^{ik} + 1} \sum_{j_i = j_s + s - 1}^{j_s + s - 1} \\
 & \sum_{n_{is} = n + \mathbb{k} - j_s + 1}^n \sum_{n_i = j_s + 1}^{n_i - j_s + 1} \sum_{n_s = n - j_i + 1}^{n_{is} + j_s - j_i - \mathbb{k}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{l_i} \sum_{j_s=1}^{()} \sum_{j_i=l_{ik}+n+s-D-j_{sa}^{ik}}^{l_{ik}+s-1} \sum_{j_s=1}^{l-j_{sa}^{ik}+1}
 \end{aligned}$$

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$$\begin{aligned}
& \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_s = n - j_i + 1)}^{(n_i - j_i - \mathbb{k} + 1)} \\
& \frac{(n_i - n_s - \mathbb{k} - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i - \mathbb{k} + 1)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
& \frac{(l_i - l_s - s - 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!} \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \\
& \sum_{j_s = 1}^{D + l_s + s - n} \sum_{j_{sa} = 1}^{(l_s - k + 1)} \sum_{j_{sa} = 1}^{n - D - j_{sa}^{lk} + s - 1} \\
& \sum_{n_i = n + \mathbb{k}} \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \\
& \sum_{(n_s = n_{ik} + j_s + j_{sa}^{lk} - j_i - j_{sa}^{lk})}^{(n_s - j_{sa}^{lk})} \\
& \frac{(n_s - j_{sa}^{lk})!}{(n_s + j_i - n - j_{sa}^{lk})! \cdot (n - j_i)!} \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
\end{aligned}$$

$$((D - j_{sa}^{lk}) < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{lk} + 1 = l_s \wedge l_i + j_{sa}^{lk} - s > l_{ik} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s \leq j_i \leq n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$l_i \leq D + s - n) \wedge$$

$$D \geq n < n \wedge l_i - s + 1 > 0 \wedge$$

$$j_{sa}^{ik} = j_i - 1 \wedge j_{sa}^s \leq j_i - 1 \wedge$$

$$S: \{j_{sa}^s, \dots, j_{sa}^i\} \vee S: \{j_{sa}^s, \dots, j_{sa}^{ik}, k, j_{sa}^i\} \wedge$$

$$s > i - k = s + k \wedge$$

$$k_z: z = 1 =$$

$$f_z S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i-l-1} \sum_{(j_s=2)}^{(j_i-s+1)} \sum_{j_i=s+1}^{l_s+s-k}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{i_s}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{i_s}+j_s-j_i-k}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(n - l_i)!}{(D - l_i)!} \cdot \sum_{k=1}^{l_s - k + 1} \sum_{j_i = l_s + s - k + 1}^{n_i - j_s + 1} \sum_{n_s = n + \mathbb{k} - j_s + 1}^{n_{is} + j_s - j_i - \mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{l_i} \sum_{j_s=1}^{l_i - k} \sum_{j_i=s}^{l_i - k + 1}$$

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$$\sum_{n_i=n+l_k}^n \sum_{(n_s=n-j_i+1)}^{(n_i-j_i-l_k+1)} \frac{(n_i - n_s - l_k - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i - l_k + 1)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_i - l_s - s - 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!}$$

$$\frac{(D - l_i)}{(D + s - l_i)! \cdot (n - j_i)!}$$

$$\sum_{i=1}^{l-1} \sum_{(j_s=j_i-s)}^{l_s+s-k}$$

$$\sum_{n_i=n+l_k} \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{(n_{is}=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^{ik})}^{()}$$

$$\frac{(n_s - j_{sa}^s)!}{(n_s + j_i - n - j_{sa}^s)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=i}^{()} \sum_{(j_s=1)} \sum_{j_i=s}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n_i+j_{sa}^s-j_s-j_{sa}^{ik}+1)}^{()} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^{ik})}$$

$$\frac{(n_s - j_{sa}^s)!}{(n_s + j_i - n - j_{sa}^s)! \cdot (n - j_i)!}$$

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$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$((D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s$$

$$(l_i \leq D + s - n) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^l - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s > 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned}
 f_{j_s, j_i}^{SDOSD} &= \sum_{k=1}^{l_i-1} \sum_{(j_s=2)}^{(l_s-k+1)} \sum_{j_i=j_s+s-1}^{l_i-k+1} \\
 &\sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i}^{n_{i_s}+j_s-j_i-l_k} \\
 &\frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \\
 &\frac{(n_{i_s} - n_s - l_k - 1)!}{(j_i - j_s - 1)! \cdot (n_{i_s} + j_s - n - l_k)!} \cdot \\
 &\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 &\frac{(l_s - l_i - k + 1)!}{(l_s - l_i - k + 1)! \cdot (j_s - 2)!} \cdot \\
 &\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_s - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 &\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!} + \\
 &\sum_{k=1}^{()} \sum_{(j_s=1)}^{l_i-1} \sum_{j_i=s}^{l_i+1} \\
 &\sum_{n_i=n+l_k}^n \sum_{(n_s=n-j_i+1)}^{(n_i-j_i-l_k+1)} \\
 &\frac{(n_i - n_s - l_k - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i - l_k + 1)!} \cdot \\
 &\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 &\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!} \cdot \\
 &\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!} -
 \end{aligned}$$

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$$\sum_{k=1}^{i^{l-1} (l_s - k + 1)} \sum_{(j_s=2)} \sum_{j_i=j_s+s-1} \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_{sa}^s-l_k)}^{(n_s-j_s+1)} \frac{(n_s - j_{sa}^s)!}{(n_s + j_i - n - j_{sa}^s)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \sum_{k=i^l} \sum_{(j_s=1)} \sum_{j_i=s}^{(n_s - j_{sa}^s)!} \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n_{is}+j_{sa}^s-j_s-j_{sa}^{ik}+1)}^{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-l_k)} \frac{(n_s - j_{sa}^s)!}{(n_s + j_i - n - j_{sa}^s)! \cdot (n - j_i)!} \cdot \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$\begin{aligned} & ((D \geq n < n \wedge l_s \leq D - n + 1 \wedge \\ & 1 \leq j_s \leq j_i - s + 1 \wedge \\ & j_s + s - 1 \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^s + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge \\ & D + s - n < l_i \leq D + l_s + s - n - 1) \vee \\ & (D \geq n < n \wedge l_s \leq D - n + 1 \wedge \\ & 1 \leq j_s \leq j_i - s + 1 \wedge \end{aligned}$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^s, \dots, k, j_{sa}^i\} \quad s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \dots, i\} \wedge$$

$$s > 2 \wedge s = i + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(j_i-s+1)} \sum_{j_i=l_i+n-D}^{l_s+s-k}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - k - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - k)!}$$

$$\begin{aligned}
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{i^{l-1} (n_s - 1) \dots l_i^{i+1}} \sum_{j_s=2}^{n_s} \sum_{j_i=l_s+s-i}^{n_s+j_s-j_i-k} \\
 & \sum_{n_i=n+k}^{n_i-j_s+1} \sum_{n_s=n+k-j_s+1}^{n_s+j_s-j_i-k} \sum_{j_i+1}^{n_i-n_s-1} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - k - 1)!}{(j_i - 1)! \cdot (n_{is} + j_s - n_s - j_i - k)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{i^l} \sum_{j_s=1}^{()} \sum_{j_i=l_i+n-D}^{l_i-i^{l+1}} \\
 & \sum_{n_i=n+k}^n \sum_{n_s=n-j_i+1}^{(n_i-j_i-k+1)} \\
 & \frac{(n_i - n_s - k - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i - k + 1)!} \cdot
 \end{aligned}$$

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$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \binom{()}{(j_s=j_i-s+1)} \sum_{j_s=n-D}^{l_s+s-k}$$

$$\sum_{n_i=n}^n \binom{()}{(n_{is}=n+k-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik} - j_{sa}^{ik} (n_{ik}=k+j_s+j_{sa}^{ik}-j_i-j_{sa}^{ik})}$$

$$\frac{(n_s - j_{sa}^s)!}{(n_s + j_{sa}^s - n - j_{sa}^s)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$(D \geq n < D - n + 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < D - n + 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s > 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$fz S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i^{l-1} (l_i + n - D - s)} \sum_{(j_s=2)}^{l_i - k + 1} \sum_{j_i = l_i + n - D}^{n} \sum_{n_i = n + \mathbb{k}}^{(n_i - j_s + 1)} \sum_{n_s = n - j_i + 1}^{n_{is} + j_s - j_i - \mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{i-1} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)} \sum_{j_i=j_s+s-k}^{l_i-k+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_s=n+k-j_s)}^{(n_i-j_s+1)} \sum_{n_i=j_i+1}^{n_i+j_s-j_i-k}$$

$$\frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_s + 1)!}$$

$$\frac{(n_i - n_s - 1)!}{(j_i - 1)! \cdot (n_i + j_s - n_s - l_i - k)!}$$

$$\frac{(n_i - j_i - 1)!}{(n_i + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(D - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^i \sum_{(j_s=1)}^{()} \sum_{j_i=l_i+n-D}^{l_i-i+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_s=n-j_i+1)}^{(n_i-j_i-k+1)}$$

$$\frac{(n_i - n_s - k - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i - k + 1)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!}$$

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$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)} \sum_{j_i=j_s+s-1}^n \sum_{n_i=n+k}^n \sum_{(n_i+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \frac{(n_{ik}+j_s+j_{sa}^{ik}-k)!}{(n_{ik}+j_s+j_{sa}^{ik}-k)! \cdot (n - j_i)!} \cdot \frac{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}{(l_s - l_i)!} \cdot \frac{(D - j_i - n - l_i)! \cdot (n - j_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + j_{sa}^{ik} = l_s \wedge l_{ik} + j_{sa}^{ik} - j_{sa}^{ik} = l_i \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \wedge D + l_s + n - n \leq n \wedge$$

$$D \geq n < n \wedge I = \mathbb{K} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i \wedge j_{sa}^s \leq j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^i, \mathbb{K}, j_{sa}^i\} \cup \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{K}, j_{sa}^i\} \wedge$$

$$s > 2 \wedge s = \dots + \mathbb{K} \wedge$$

$$fz S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i^{l-1} (j_i - s + 1)} \sum_{(j_s=2)}^{l_{sa} + s - k - j_{sa} + 1} \sum_{j_i=l_i+n-D}$$

$$\begin{aligned}
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{j_i=l_{sa}+s-k-j_{sa}+2}^{i^{l-1}(l_{sa}-j_{sa}+2)} \sum_{j_i=l_{sa}+s-k-j_{sa}+2}^{l_i-k+1} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +
 \end{aligned}$$

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$$\begin{aligned}
& \sum_{k=1}^{()} \sum_{j_s=1}^{l_i - i^{l+1}} \sum_{j_i=l_i+n-D}^{()} \\
& \sum_{n_i=n+k}^n \sum_{(n_s=n-j)}^{(n_i-j_i-k+1)} \\
& \frac{(n_i - n_s - k - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i - k + 1)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - j_s - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s - 1)! \cdot (j_i - s)!} \cdot \\
& \frac{()}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{k=1}^{D+l_s+s} \sum_{j_i=j_i-s+1}^{()} \sum_{j_i=l_i+n-D}^{l_{sa}+s-k-j_{sa}+1} \\
& \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{()} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^{ik})}^{()} \\
& \frac{(n_s - j_{sa}^s)!}{(n_s + j_i - n - j_{sa}^s)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
\end{aligned}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s > 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$fz S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i^{l-1} (l_i + n - D - s)} \sum_{(j_s=2)}^{k+1} \sum_{j_i=n-D}^{n-k+1} \frac{\binom{n_i - j_s}{n_i - n + \mathbb{k} - j_s} \binom{n_{is} + j_s - j_i - 1}{n_{is} - j_i + 1}}{(j_s - 2)! \cdot (n_i - n_{is} - 1)!} \cdot \frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - n_{is} - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{i^{l-1} (l_{sa} - k - j_{sa} + 2)} \sum_{(j_s=l_i+n-D-s+1)}^{l_i - k + 1} \sum_{j_i=j_s+s-1}^n \frac{\binom{n_i - j_s + 1}{n_{is} = n + \mathbb{k} - j_s + 1} \binom{n_{is} + j_s - j_i - \mathbb{k}}{n_s = n - j_i + 1}}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

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$$\frac{(n_{is} - n_s - k - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - k)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!} \cdot$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot$$

$$\frac{(l_i)!}{(D + j_i - n - l_i)! \cdot (j_i)!} +$$

$$\sum_{k=1}^{l_i - i + 1} \sum_{j_s=l_i+n-D}^{l_i - i + 1} \sum_{n_i=n+k}^n \sum_{n_s=n-j_i+1}^{(n_i - j_i - k + 1)}$$

$$\frac{(n_{is} - n_s - k - 1)!}{(n_i - n_s - j_i - k + 1)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{sa}-k-j_{sa}+2)} \sum_{j_i=j_s+s-1}^{(l_{sa}-k-j_{sa}+2)}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s - j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik} - j_i - j_{sa}^s - k)}$$

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$$\frac{(n_s - j_{sa}^s)!}{(n_s + j_i - n - j_{sa}^s)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - l_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s > 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned} \sum_{j_s, j_i}^{OSD} &= \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(j_i-s+1)} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{ik}+s-k-j_{sa}^{ik}+1} \\ &\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}} \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \\ &\frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!} \\ &\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\ &\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \end{aligned}$$

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$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{i^{l-1} (l_{ik} - k - j_{sa}^{ik} + 2)} \sum_{(j_s=2)}^{l_{sa} + s - k - j_{sa} + 1} \sum_{j_i = l_{ik} + s - k - j_{sa}^{ik} + 2}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s)}^{(n_i - j_s + 1)} \sum_{(n_i - j_s - j_i - \mathbb{k})}^{n_i - j_s - j_i - \mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_i - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(j_i - n_s - 1)!}{(j_i - 1)! \cdot (n_i + j_s - n_s - j_i - \mathbb{k})!} \cdot$$

$$\frac{(n_i + j_i - n - 1)!}{(n_i + j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(n_i - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=i^l}^{()} \sum_{(j_s=1)}^{l_{sa} + s - i^l - j_{sa} + 1} \sum_{j_i = l_{sa} + n + s - D - j_{sa}}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_s = n - j_i + 1)}^{(n_i - j_i - \mathbb{k} + 1)}$$

$$\frac{(n_i - n_s - \mathbb{k} - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i - \mathbb{k} + 1)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_i-s+1)}^{()} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{ik}+s-k-j_{sa}^{ik}+1} \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{(n_{ik}+j_s+j_{sa}^{ik}-j_i+l_k)} \frac{(n_{is}-j_{sa}^s)!}{(n_{is}-j_s+1)! \cdot (n - j_i)!} \frac{(l_s - k)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \frac{(l_i - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{ik} + j_{sa}^{ik} - j_{sa} > l_i \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 1 \wedge$$

$$j_{sa}^{lk} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^i, l_k, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, l_k, j_{sa}^i\} \wedge$$

$$s > 2 \wedge s = \dots + k \wedge$$

$$fz_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(l_{sa}+n-D-j_{sa})} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{sa}+s-k-j_{sa}+1}$$

$$\begin{aligned}
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=0}^{i-1} \sum_{j_i=j_s+s-1}^{(l_{ik}-l_{sa}+2)}^{(l_{ik}-l_{sa}+2)} \sum_{j_i=j_s+s-1}^{l_{sa}+s-k-j_{sa}+1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +
\end{aligned}$$

$$\begin{aligned}
 & \sum_{k=1}^{\binom{D-l_i}{j_s=1}} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{sa}+s-i^{l-j_{sa}+1}} \\
 & \sum_{n_i=n+k}^n \sum_{(n_s=n-j)}^{(n_i-j_i-k+1)} \\
 & \frac{(n_i - n_s - k - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i - k + 1)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - j_s - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s - 1)! \cdot (j_i - s)!} \cdot \\
 & \frac{\binom{D-l_i}{j_s=1}}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \\
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_{ik}-k-1+2)} \sum_{j_i=j_s+s-1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-k)}^{\binom{D-l_i}{j_s=1}} \\
 & \frac{(n_s - j_{sa}^s)!}{(n_s + j_i - n - j_{sa}^s)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^i, \mathbb{k}, j_{sa}^i\}$$

$$s > 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(j_i-s+1)} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_s+s-k}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(l_s-k+1)} \sum_{j_i=l_s-k+1}^{l_{sa}+i-k-j_{sa}+1} \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-1)}^{(j_s+1)} \sum_{n_s=n-j_i+1}^{j_i-l_k} \frac{(n_i - n_s - l_k - 1)!}{(j_s - 1)! \cdot (n_i - n_s - j_s + 1)!} \cdot \frac{(n_s - n_s - l_k - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - l_k)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{()} \sum_{(j_s=1)}^{l_{sa}+s-i-l-j_{sa}+1} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{()} \sum_{n_i=n+l_k}^n \sum_{(n_s=n-j_i+1)}^{(n_i-j_i-l_k+1)} \frac{(n_i - n_s - l_k - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i - l_k + 1)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

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$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_i-s+1)}^{()} \sum_{j_i=l_{sa}+n+s-D-j_s}^{l_s+s-k}$$

$$\sum_{n_i=n}^n \sum_{n_i=n}^{(j_s+1)} \sum_{n_i=n}^{(n+j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+1}^{()} \sum_{n_{ik}=n_{ik}+j_s}^{()} \sum_{n_{ik}=n_{ik}+j_s}^{(k-j_i-j_{sa}^{s-k})}$$

$$\frac{(n_s - j_s)!}{(n_s + j_i - n - j_{sa}^s)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s \leq D - n + 1) \vee$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s - s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1)) \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k, j_{sa}^i\} \wedge$$

$$s > 2 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$f_z^{S^{DOSD}} = \sum_{k=1}^{i-1} \sum_{j_s=l_{sa}+n-D-j_{sa}+1}^{l_s-k-j_{sa}+1} \sum_{j_i=n+lk}^{n+lk-j_s+1} \sum_{n_{is}=n-j_i+1}^{n_{is}+j_s-j_i-k} \frac{(n_i - n_{is} - 1)!}{(i - j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - k - 1)!}{(i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - k)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{i-1} \sum_{j_s=l_{sa}+n-D-j_{sa}+1}^{l_s-k-1} \sum_{j_i=j_s+s-1}^{l_{sa}+s-k-j_{sa}+1} \sum_{n_i=n+lk}^n \sum_{n_{is}=n+lk-j_s+1}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k}$$

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$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - s + 1)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(n - l_i)!}{(n - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{i=1}^n \sum_{j_s=1}^{l_{sa}} \sum_{j_i=1}^{l_{sa} + n + s - D - j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_s=n-j_i+1)}^{(n_i-j_i-\mathbb{k}+1)}$$

$$\frac{(n_i - n_s - \mathbb{k} - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i - \mathbb{k} + 1)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_s-k-1)} \sum_{j_i=j_s+s-1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-k)}^{()}$$

$$\frac{(n_s - j_{sa}^s)!}{(n_s + j_i - n - j_{sa}^s)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!}$$

$$\frac{(D - l_s - k)!}{(D + j_i - n - l_s)! \cdot (n - j_i)!}$$

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$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} = 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}^i\} \wedge$$

$$s \geq 2 \wedge s = s \Rightarrow$$

$$fz S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik})}^{(j_i-s+1)} \sum_{(l_{ik}+s-k-j_{sa}^{ik})}^{(l_{ik}+s-k-j_{sa}^{ik})} \sum_{(n_i=n-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_s=n-j_i+1)}^{(n_{is}+j_s-j_i)}$$

$$\frac{(n_i - n_{is} - 1)!}{(i - j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{D-n+1} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik})}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{(j_i=l_{ik}+s-k-j_{sa}^{ik}+2)}^{(l_i-k+1)}$$

$$\sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{(n_{is}+j_s-j_i)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i - 1)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - 1)!}{(j_s + l_i - j_i - 1)! \cdot (j_i - j_s - 1)!} \cdot \frac{(n - l_i)!}{(n - j_i - 1)! \cdot (n - j_i)!} \cdot \sum_{k=0}^{l_s + s - n - j_i} \binom{n - j_s + k}{j_s = j_i - k} \sum_{j_i = l_i + n - D}^{j_{sa}^{ik} + 1} \sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s + 1)}^{(n_i - j_s + 1)} \sum_{k = n_{is} + j_{sa}^s - j_{sa}^{ik}} \binom{n_s}{n_s = n_{ik} + j_s + j_{sa}^{ik} - j_i - j_{sa}^s - k} \frac{(2 \cdot n_{is} + j_s - n_s - j_i - s - 2 \cdot k)!}{(2 \cdot n_{is} + 2 \cdot j_s - n_s - j_i - n - 2 \cdot k - j_{sa}^s)! \cdot (n + j_{sa}^s - j_s - s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$l_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D \geq n < n \wedge l = k = 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^l - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}^l\} \wedge$$

$$s \geq 2 \wedge s = s \Rightarrow$$

$$fz_{j_s, j_i}^{DOSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_i+n-D-s)} \sum_{j_i=l_i+n}^{l_i-k+1} \frac{(n_i-j_s+1)!}{(n_i-n_{is}-1)!} \frac{n_{is}+j_s-j_i}{n_s-j_i+1} \frac{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!}{(n_{is}-n_s-1)!} \frac{(n_{is}-n_s-1)!}{(j_s-1)! \cdot (n_{is}+j_s-n_s-j_i)!} \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \frac{(l_i-l_s-s+1)!}{(j_s+l_i-j_i-l_s)! \cdot (j_i-j_s-s+1)!} \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \sum_{k=1}^{D-n+1} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j_i=j_s+s-1}^{l_i-k+1} \frac{(n_i-j_s+1)!}{n_i=n} \frac{(n_i-j_s+1)!}{(n_i-n_{is}-1)!} \frac{n_{is}+j_s-j_i}{n_s=n-j_i+1} \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \frac{(n_{is}-n_s-1)!}{(j_i-j_s-1)! \cdot (n_{is}+j_s-n_s-j_i)!} \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!}$$

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$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j_i=l_i+s-1}^{(n-j_i)} \sum_{n_i=n-l_i}^{(n)} \sum_{n_{is}=n+l_k-j_s+1}^{(n)} \frac{(2 \cdot n_{is} + j_s - n_s - j_i - 2 \cdot l_k)!}{(2 \cdot n_{is} + 2 \cdot j_s - n_s - j_i - n - 2 \cdot l_k - j_i)! \cdot (n + j_{sa}^s - j_s - s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n_{is} > D - l_i + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 \leq l_s \wedge l_{ik} - j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D \geq l_i \wedge I = l_k = 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^i \wedge$$

$$s \cdot \{j_{sa}^s, j_{sa}^i\} \wedge$$

$$s \geq 2 \wedge s = s \Rightarrow$$

$$f_{z_{j_s, j_i}}^{S_{DOSD}} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(j_i-s+1)} \sum_{j_i=l_{ik}+n+s-D-j_{sa}^{ik}}^{l_s+s-k}$$

$$\begin{aligned}
& \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=1}^{D-n+1} \sum_{s=l_s+n-D}^{l_s-k+1} \sum_{j_i=l_s+s-k+1}^{l_{ik}+s-k-j_{s\bar{a}}^{ik}+1} \\
& \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
\end{aligned}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_i-s+1)}^{(\quad)} \sum_{j_i=l_{ik}+n+s-D-j_{sa}^{ik}}^{l_s+s-k} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}}^{(\quad)} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_{sa}^{ik})}^{(\quad)} \frac{(2 \cdot n_{is} + j_s - n_s - j_i - s - 2 \cdot k)!}{(2 \cdot n_{is} + 2 \cdot j_s - n_s - j_i - n - 2 \cdot k - j_{sa}^{ik})! \cdot (n + j_{sa}^{ik} - s)!} \cdot \frac{(l_s + k - 1)!}{(j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - j_s + 1)!}{(D + j_s - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - j_{sa}^{ik} = l_{ik} \wedge$$

$$D \geq n < n \wedge I = 0 \wedge$$

$$j_s \leq j_{sa}^i - 1$$

$$s: \{j_{sa}^i\} \wedge$$

$$s \geq 2 \wedge s = s \Rightarrow$$

$$fz_{j_s, j_i}^{DOSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_{ik}+n-D-j_{sa}^{ik})} \sum_{j_i=l_{ik}+n+s-D-j_{sa}^{ik}}^{l_{ik}+s-k-j_{sa}^{ik}+1} \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(l_i)!}{(D + j_i - n - l_i)! \cdot (j_i)!} +$$

$$\sum_{k=1}^{D-n+1} \sum_{(j_s=l_{ik}+n-D-j_s a)}^{(l_s-k+1)} \sum_{(j_i=j_s+s-1)}^{l_{ik}+s-k-j_s a} \sum_{n_i=n-j_s+1}^{n_i-j_s+1} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(i - l_i)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_{ik}+n-D-j_s a)}^{(l_s-k+1)} \sum_{j_i=j_s+s-1}^{l_{ik}+s-k-j_s a}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-k)}^{()}$$

$$\frac{(2 \cdot n_{is} + j_s - n_s - j_i - s - 2 \cdot k)!}{(2 \cdot n_{is} + 2 \cdot j_s - n_s - j_i - n - 2 \cdot k - j_{sa}^s)! \cdot (n + j_{sa}^s - j_s - s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - \dots)!}$$

$$\frac{(D - l_i)}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$((D \geq n < n \wedge l_s > D - n + 1 \wedge$
 $2 \leq j_s \leq j_i - s + 1 \wedge$
 $j_s + s - 1 \leq j_i \leq n \wedge$
 $l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik}) \vee$
 $(D \geq n < n \wedge l_s > D - n + 1 \wedge$
 $2 \leq j_s \leq j_i - s + 1 \wedge$
 $j_s + s - 1 \leq j_i \leq n \wedge$
 $l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik}) \vee$
 $(D \geq n < n \wedge l_s > D - n + 1 \wedge$
 $2 \leq j_s \leq j_i - s + 1 \wedge$
 $j_s + s - 1 \leq j_i \leq n \wedge$
 $(l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik})) \wedge$
 $D \geq n < n \wedge s = k = 1 \wedge$
 $j_{sa}^s = j_{sa}^i + 1 \wedge$
 $s: \{j_{sa}^s, j_{sa}^i\}$
 $s \geq 2 \wedge s = s \Rightarrow$

$$fz_{j_s, j_i}^{DOSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(j_i-s+1)} \sum_{j_i=l_i+n-D}^{l_s+s-k}$$

$$\begin{aligned}
& \sum_{n_i=n}^n \sum_{n_{is}=n-j_s+1}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=0}^{D-n} \sum_{j_s=l_s+n-D}^{(l_s-k+1)} \sum_{j_i=l_s+s-k+1}^{l_i-k+1} \\
& \sum_{n_i=n}^n \sum_{n_{is}=n-j_s+1}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -
\end{aligned}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_i-s+1)}^{()} \sum_{j_i=l_i+n-D}^{l_s+s-k} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{()} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_{sa}^s-k)}^{()} \frac{(2 \cdot n_{is} + j_s - n_s - j_i - s - 2)}{(2 \cdot n_{is} + 2 \cdot j_s - n_s - j_i - n - 2 \cdot k - j_{sa}^s) \cdot (n + j_{sa}^s - s)!} \cdot \frac{(l_s - k - 1)!}{(j_i - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D)}{(D + j_s - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik})) \wedge$$

$$D \geq n < n \wedge I = k = 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}^i\} \wedge$$

$s \geq 2 \wedge s = s \Rightarrow$

$$\begin{aligned}
 f_z S_{j_s, j_i}^{DOSD} &= \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_i+n-D-s)} \sum_{j_i=l_i+n-D}^{l_i-k+1} \\
 &\sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i}^{n_{is}+j_s-j_i} \\
 &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \\
 &\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \\
 &\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 &\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \\
 &\frac{(l_i - l_s - s + 1)!}{(l_i + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \\
 &\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 &\sum_{k=1}^{D-n+1} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)} \sum_{j_i=j_s+s-1}^{l_i-k+1} \\
 &\sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \\
 &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \\
 &\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \\
 &\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 &\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}
 \end{aligned}$$

GÜLDENYA

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)} \sum_{j_i=j_s+s-k}^{(j_s+1)}$$

$$\sum_{n_i=n}^n \sum_{n_{i+1}=n+1}^{(j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+1}^{(n_{ik}+j_s-k-j_i-j_{sa}^s-k)} \sum_{n_{i+1,k}=n_{i+1}+1}^{(n_{i+1,k}+j_s-k-j_i-j_{sa}^s-k)}$$

$$\frac{(2 \cdot n_{is} + j_s - j_i - 2 \cdot k)!}{(2 \cdot n_{is} + 2 \cdot j_s - n_s - j_i - n - k - j_{sa}^s) \cdot (n + j_{sa}^s - j_s - s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1$$

$$2 \leq j_s \leq j_i - s + 1$$

$$j_s - s - 1 \leq j_i < n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s - j_{sa}^{ik} + j_{sa}^{ik} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n - l_i \wedge I = k = 1$$

$$j_{sa}^s \leq j_{sa}^i - 1$$

$$s: (j_{sa}^i, j_{sa}^s)$$

$$s \geq 2 \wedge s - 1 \leq s \Rightarrow$$

$$f_z^{S_{j_s, j_i}^{DOSD}} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(j_i-s+1)} \sum_{j_i=l_i+n-D}^{l_{sa}+s-k-j_{sa}+1}$$

$$\begin{aligned}
 & \sum_{n_i=n}^n \sum_{n_{is}=n-j_s+1}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{l_s+1} \sum_{j_i=l_{sa}+1}^{(l_{sa-k}+2)} \sum_{j_i=l_{sa}+s-k-j_{sa}+2}^{l_i-k+1} \\
 & \sum_{n_i=n}^n \sum_{n_{is}=n-j_s+1}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -
 \end{aligned}$$

GÜLDENWA

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_i-s+1)}^{()} \sum_{j_i=l_i+n-D}^{l_{sa}+s-k-j_{sa}+1} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}}^{()} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_{sa}^{ik})}^{()} \frac{(2 \cdot n_{is} + j_s - n_s - j_i - s - 2)!}{(2 \cdot n_{is} + 2 \cdot j_s - n_s - j_i - n - 2 \cdot k - j_{sa}^{ik})! \cdot (n + j_{sa} - s)!} \cdot \frac{(l_s - k - 1)!}{(j_i - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - j_s + 1)!}{(D + j_s - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s - j_{sa} + j_{sa}^{ik} - j_{sa} - l_{ik} \wedge l_{ik} + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge k = 0$$

$$j_{sa}^s < j_{sa}^i - 1 \wedge$$

$$s; \{j_{sa}^s, j_{sa}^i\} \wedge$$

$$s \geq 2 \wedge s = j_s$$

$$fz_{j_s, j_i}^{DOSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_i+n-D-s)} \sum_{j_i=l_i+n-D}^{l_i-k+1} \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!} \cdot$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot$$

$$\frac{(l_i)!}{(D + j_i - n - l_i)! \cdot (j_i)!} +$$

$$\sum_{k=1}^{D-n+1} \sum_{j_s=l_i}^{(l_{sa}-k-j_{sa}+2)} \sum_{j_i=j_s+s-1}^{l_i-k+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{n_{is}=n+l_k-j_s+1}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - k)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{sa}-k-j_{sa}+2)} \sum_{j_i=j_s+s-1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

GÜLDÜMBA

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{()}^{()} (n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-k)$$

$$\frac{(2 \cdot n_{is} + j_s - n_s - j_i - s - 2 \cdot k)!}{(2 \cdot n_{is} + 2 \cdot j_s - n_s - j_i - n - 2 \cdot k - j_{sa}^s)! \cdot (n + j_{sa}^s - j_s - s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa}^{ik} \wedge l_i + j_s - s = l_s \wedge$$

$$D \geq n < n \wedge I = k = 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}^i\} \wedge$$

$$s \geq 2 \wedge s = s \Rightarrow$$

$$fz^{DOS}_{j_s, j_i} \sum_{k=1}^{D-1} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(j_i-s+1)} \sum_{(j_i=l_{sa}+n+s-D-j_{sa})}^{l_{ik}+s-k-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_s=n-j_i+1)}^{n_{is}+j_s-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{D-n+1} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j_i=l_{ik}+s-k-j_{sa}^{ik}+1}^{l_{sa}+s-k-j_{sa}+1}$$

$$\sum_{n_i=n}^n \sum_{(n_{is}=n-j_s-j_i+1)}^{(n_i-j_s+1)} \sum_{(n_s=n_{is}+j_s-j_i)}^{(n_s+j_s-j_i)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_i - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - j_s - 1)!}{(n_{is} + j_s - s - j_i)!}$$

$$\frac{(n_i + j_i - n - 1)!}{(n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_i-s+1)}^{(\quad)} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{ik}+s-k-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-k)}^{(\quad)}$$

$$\frac{(2 \cdot n_{is} + j_s - n_s - j_i - s - 2 \cdot k)!}{(2 \cdot n_{is} + 2 \cdot j_s - n_s - j_i - n - 2 \cdot k - j_{sa}^s)! \cdot (n + j_{sa}^s - j_s - s)!}$$

GÜLDENYA

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} = 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}^i\} \wedge$$

$$s \geq 2 \wedge s = s \Rightarrow$$

$$fz_{j_s, j_i}^{SDOSD} = \sum_{k=0}^{D-n+1} \sum_{l_i=l_{ik}+n-D-k}^{(l_{sa}+D-j_{sa})} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{n+s-k-j_{sa}+1} \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

GÜLDÜNYA

$$\begin{aligned}
 & \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j_i=j_s+s-1}^{l_{sa}+s-k-j_{sa}+1} \\
 & \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i}^{n_{is}+j_s-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - j_s - k + 1)!}{(j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_s - l_s)! \cdot (l_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{D+s-n-l_i} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j_i=j_s+s-1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{()} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-k)} \\
 & \frac{(2 \cdot n_{is} + j_s - n_s - j_i - s - 2 \cdot k)!}{(2 \cdot n_{is} + 2 \cdot j_s - n_s - j_i - n - 2 \cdot k - j_{sa}^s)! \cdot (n + j_{sa}^s - j_s - s)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

$((D \geq n < n \wedge l_s > D - n + 1 \wedge$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \wedge$$

$$D \geq n < n \wedge l = k = 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}^i\} \wedge$$

$$s \geq 2 \wedge s = s \Rightarrow$$

$$fz_{ik} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(j_i-s+1)} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_s+s-k} \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)} \sum_{j_i=l_s+s-k+1}^{l_{sa}+s-k-j_{sa}+1}$$

$$\sum_{n_i=n}^n \sum_{(n_{is}=n_i-1)}^{(n_i-j_s+1)} \sum_{j_{i+1}}^{n_{is}+j_s-j_i}$$

$$\frac{(j_s - 2)! \cdot (n_{is} - n_{is} - j_s + 1)!}{(n_{is} - 1)! \cdot (n_{is} + j_s - j_i - j_i)!}$$

$$\frac{(n_s - 1)!}{(D + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_i-s+1)}^{()} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_s+s-k}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^{ik})}^{()}$$

$$\frac{(2 \cdot n_{is} + j_s - n_s - j_i - s - 2 \cdot k)!}{(2 \cdot n_{is} + 2 \cdot j_s - n_s - j_i - n - 2 \cdot k - j_{sa}^s)! \cdot (n + j_{sa}^s - j_s - s)!}$$

GÜLDÜSÜZYA

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \wedge$$

$$D \geq n < n \wedge l = 0 \wedge$$

$$j_s \leq j_{sa}^i - 1$$

$$s: \{j_{sa}^i\} \wedge$$

$$j_s \geq 2 \wedge j_s = s \Rightarrow$$

$$fz_{j_s, j_i}^{DOSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_{sa}+n-D-j_{sa})} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{sa}+s-k-j_{sa}+1} \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 1)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} + \frac{(l_i)!}{(D + j_i - n - l_i)! \cdot (j_i)!} + \sum_{k=1}^{D-n+1} \sum_{j_s=l_{sa}+n-D-j_{sa}}^{(l_s-k-1)} \sum_{j_i=j_s+s-1}^{l_{sa}+s-k-j_{sa}} \sum_{n_i=n+l_k}^n \sum_{n_{is}=n+l_k-j_s+1}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{j_s=l_{sa}+n-D-j_{sa}+1}^{(l_s-k-1)} \sum_{j_i=j_s+s-1} \sum_{n_i=n+l_k}^n \sum_{n_{is}=n+l_k-j_s+1}^{(n_i-j_s+1)}$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-k)} \frac{(2 \cdot n_{is} + j_s - n_s - j_i - s - 2 \cdot k)!}{(2 \cdot n_{is} + 2 \cdot j_s - n_s - j_i - n - 2 \cdot k - j_{sa}^s)! \cdot (n + j_{sa}^s - j_s - s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_i \wedge$$

$$l_i \leq D + s - n \wedge$$

$$D \geq n < n \wedge I = k = 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}^i\} \wedge$$

$$s \geq 2 \wedge s = s =$$

$$fz_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i^{l-1} (j_i - s + 1)} \sum_{(j_s=2)}^{l_{ik} + s - k - j_{sa}^{ik} + 1} \sum_{j_i=s+1}^{n_i - j_s + 1} \sum_{n_i=n}^{n_{is} + j_s - j_i} \sum_{(n_{is}=n-j_s+1)}^{n_s = n - j_i + 1} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\begin{aligned}
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{i l - 1} \sum_{(j_s=2)}^{(l_{ik-k-j_{sa}^{ik}+2})} \sum_{i=l_{ik+s-1}}^{l_{ik+1}} \sum_{j_s=2}^{j_{sa}^{ik}+2} \\
 & \sum_{n_i=n}^n \sum_{(n_{is}=n_{is}+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n-j_i} \\
 & \frac{(n_i - n_s - 1)!}{(j_s - 1)! \cdot (n_i - n_s - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=i}^{\binom{\cdot}{i}} \sum_{(j_s=1)}^{l_i - i + 1} \sum_{j_i=s} \\
 & \sum_{n_i=n}^n \sum_{(n_s=n-j_i+1)}^{(n_i-j_i+1)} \\
 & \frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot
 \end{aligned}$$

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$$\begin{aligned}
& \frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!} \cdot \\
& \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!} \cdot \\
& \sum_{k=1}^{i^{l-1}} \sum_{(j_s=j_i-s+1)}^{(\quad)} \sum_{j_i=s+1}^{l_{ik}+s-k-j_{sa}^{ik}+1} \\
& \sum_{n_i=n+1}^n \sum_{(n+j_s+1)}^{(n+j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^{is}+j_s+1}^{(n+j_s+1)} \sum_{(n+j_s+1)}^{(n+j_s+1)} \\
& \frac{(2 \cdot n_{is} + j_s - j_i - n - 2 \cdot lk)!}{(2 \cdot n_{is} + 2 \cdot j_s - n_s - j_i - n - 2 \cdot lk - j_{sa}^s) \cdot (n + j_{sa}^s - j_s - s)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{k=i}^{(\quad)} \sum_{(j_s=1)}^{(\quad)} \sum_{j_i=s}^{(\quad)} \\
& \sum_{n_i=n+lk}^{(\quad)} \sum_{(n_{ik}=n_i+j_{sa}^s-j_s-j_{sa}^{ik}+1)}^{(\quad)} \sum_{n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-lk}^{(\quad)} \\
& \frac{(2 \cdot n_i - n_s - j_s - j_i - s - 2 \cdot lk + 2)!}{(2 \cdot n_i - n_s - j_i - n - 2 \cdot lk + 1)! \cdot (n - s)!} \cdot \\
& \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}
\end{aligned}$$

$$D \geq n < n \wedge l_i \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

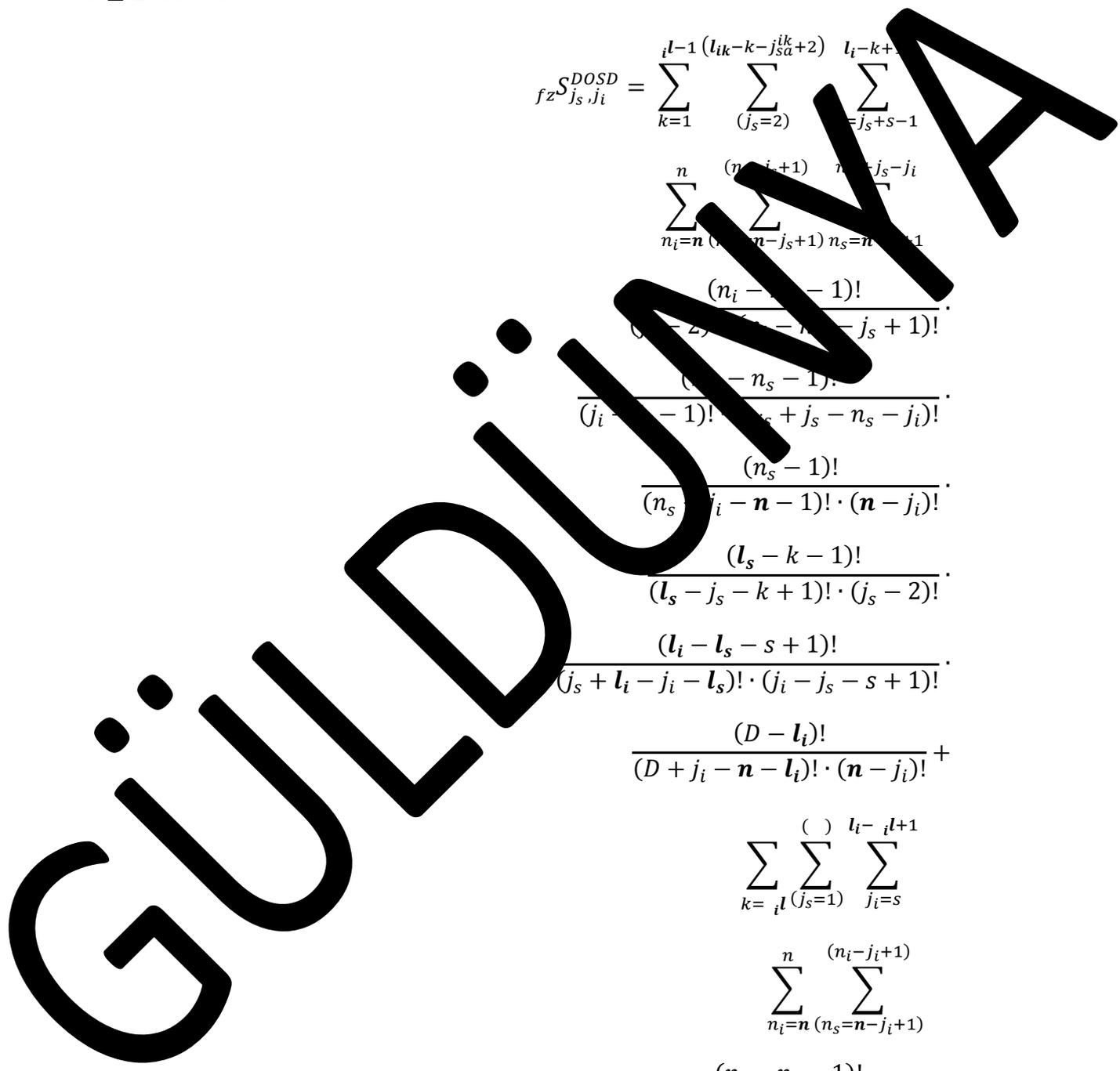
$D \geq n < n \wedge I = \mathbb{k} = 0 \wedge$

$j_{sa}^s \leq j_{sa}^i - 1 \wedge$

$s: \{j_{sa}^s, j_{sa}^i\} \wedge$

$s \geq 2 \wedge s = s \Rightarrow$

$$fz^S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(l_i-k-j_{sa}^{ik}+2)} \sum_{l_i-k+1}^{l_i-k+1} \sum_{n_i=n}^n \sum_{(n_s=n-j_s+1)}^{(n_s=n-j_s+1)} \frac{(n_i - j_i + 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=i}^{l_i} \sum_{(j_s=1)}^{l_i-k+1} \sum_{j_i=s}^{l_i-k+1} \sum_{n_i=n}^n \sum_{(n_s=n-j_i+1)}^{(n_i-j_i+1)} \frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$



$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - j_s - s)!} \cdot \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!} \cdot \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j_i=j_s+s-1}^{(n-j_s+1)} \sum_{n_i=n+l_k}^{(n+l_k+j_s+1)} \frac{(2 \cdot n_{is} + 2 \cdot j_s - n_s - j_i - n - 2 \cdot l_k)!}{(2 \cdot n_{is} + 2 \cdot j_s - n_s - j_i - n - 2 \cdot l_k - j_{sa}^s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{k=i}^{()} \sum_{(j_s=1)} \sum_{j_i=s}^{()} \sum_{n_i=n+l_k}^{()} \sum_{(n_{ik}=n_i+j_{sa}^s-j_s-j_{sa}^{ik}+1)} \sum_{n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-l_k}^{()} \frac{(2 \cdot n_i - n_s - j_s - j_i - s - 2 \cdot l_k + 2)!}{(2 \cdot n_i - n_s - j_i - n - 2 \cdot l_k + 1)! \cdot (n - s)!} \cdot \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} = 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^l - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}^l\} \wedge$$

$$s \geq 2 \wedge s = s \Rightarrow$$

$$fz S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i^{l-1} (j_i - s + 1) l_{ik} - k - j_{sa}^{ik} + 1} \sum_{j_i = l_{ik} - D}^{n - (n_i - j_s + 1) - j_i} \sum_{n_i = n - (n_{is} - 1) - n_s = n - j_i + 1}^n \frac{(n_i - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(j_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{i^{l-1} (l_{ik} - k - j_{sa}^{ik} + 2)} \sum_{(j_s=2)}^{l_i - k + 1} \sum_{j_i = l_{ik} + s - k - j_{sa}^{ik} + 2}^{n_{is} + j_s - j_i} \sum_{n_i = n - (n_{is} - j_s + 1) - n_s = n - j_i + 1}^n \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s - 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_i-s+1)}^{()} \sum_{j_i=l_i+n-D}^{l_{ik}+s-k-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-\mathbb{k})}^{()}$$

$$\frac{(2 \cdot n_{is} + j_s - n_s - j_i - s - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_s - n_s - j_i - n - 2 \cdot \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - j_s - s)!}$$

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$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge I = \mathbb{K} = 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}^i\} \wedge$$

$$s \geq 2 \wedge s = s \Rightarrow$$

$$fz = \sum_{k=1}^{l_i+n-D-s} \sum_{(j_s=2)}^{l_i-k+1} \sum_{j_i=l_i+n-D}^{n_i+n-D-s} \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

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$$\begin{aligned}
 & \sum_{k=1}^{i^{l-1}} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{ik-k-j_s^{ik}+2})} \sum_{j_i=j_s+s-1}^{l_i-k+1} \\
 & \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i}^{n_{is}+j_s-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l_i - k + 1)!}{(l_s - l_i - s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_s - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{i^l} \sum_{(j_s=1)}^{()} \sum_{j_i=l_i+n-D}^{l_i-i^{l+1}} \\
 & \sum_{n_i=n}^n \sum_{(n_s=n-j_i+1)}^{(n_i-j_i+1)} \\
 & \frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -
 \end{aligned}$$

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$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j_i=j_s+s-1} \sum_{n_i=n+lk}^n \sum_{(n_{is}=n+lk-j_s)}^{(n_i-j_s+1)} \frac{(2 \cdot n_{is} + j_s - n_s - j_i - s - 2 \cdot lk)}{(2 \cdot n_{is} + 2 \cdot j_s - n_s - j_i - n - 2 \cdot lk - j_{sa}^{ik} + (n + j_{sa}^{ik} - s)!) \cdot (l_s - k - 1)! \cdot (l_s - k + 1)! \cdot (j_s - 2)! \cdot (D - j_s - k + 1)!} {(D + j_s - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_i - s + 1 \wedge$

$j_s + s - 1 \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - 1 = l_{ik} \wedge$

$D + s - n < l_i \leq l_s + l_s + s - n - 1 \wedge$

$D > n < n \wedge n = lk = 0$

$j_{sa}^s < j_{sa}^i - 1 \wedge$

$s \in \{j_{sa}^s, j_{sa}^i\} \wedge$

$s \geq 2 \wedge s = j_s$

$$fz_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(j_i-s+1)} \sum_{j_i=l_{ik}+n+s-D-j_{sa}^{ik}}^{l_s+s-k} \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!} \cdot$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot$$

$$\frac{(l_i)!}{(D + j_i - n - l_i)! \cdot (j_i)!} +$$

$$\sum_{k=0}^{i-1} \sum_{j_s=1}^{(l_s - k)} \sum_{j_i=k+1}^{(l_i - j_s + 1)}$$

$$\sum_{n_i=n}^n \sum_{(n_{is}=n - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_s=n - j_i + 1}^{n_{is} + j_s - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(i - l_i - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=0}^{i-1} \sum_{j_s=1}^{(l_s - k)} \sum_{j_i=l_i + n + s - D - j_s}^{(l_i + s - i - j_s^k + 1)}$$

$$\sum_{n_i=n}^n \sum_{(n_s=n - j_i + 1)}^{(n_i - j_i + 1)}$$

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$$\frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - l_s - 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_i-s)}^{()} \sum_{(i=l_{ik}+n+s-D-k)}^{l_s+s}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_i=n+l_k)}^{(n_i-j_s+1)} (n_i-j_s+1)$$

$$\sum_{(i=n_{is}+j_{sa}^s-j_{sa}^{ik})} \sum_{(i=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-k)}^{()}$$

$$\frac{(2 \cdot n_{is} + j_s - j_i - 2 \cdot l_k)!}{(2 \cdot n_{is} + 2 \cdot j_s - n_s - j_i - 2 \cdot l_k - j_{sa}^s)! \cdot (n + j_{sa}^s - j_s - s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + 1 \leq j_i - s$$

$$l_{ik} - j_{sa}^{ik} + j_s > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$l_i + s - 1 < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge I = k = 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}^i\} \wedge$$

$$s \geq 2 \wedge s = s \Rightarrow$$

$$fz S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(l_{ik}+n-D-j_{sa}^{ik})} l_{ik+s-k-j_{sa}^{ik}+1} \sum_{j_i=l_{ik}+n+s-D-j_{sa}^{ik}}^{(n_i-j_s+1)} \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i + l_s - s + 1)!}{(l_i + l_s - s + 1)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{i-1} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_s-k+1)} l_{ik+s-k-j_{sa}^{ik}+1} \sum_{j_i=j_s+s-1}^{(n_i-j_s+1)} \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

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$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{l_i} \sum_{j_s=1}^{(j_s=1)} \sum_{j_i=l_{ik}+n+s-D-j_{sa}^{ik}+1}^{l_{ik}+s-i-l-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+k}^n \sum_{n_i=n+k}^{(n_i-j_s+1)}$$

$$\frac{(n_s - n_s - 1)!}{(n_s - 2)! \cdot (n_s - j_i + 1)!} \cdot$$

$$\frac{(n_s - n_s - 1)!}{(n_s - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

$$\sum_{k=1}^{D+l_s+n-l_i} \sum_{j_s=l_{ik}+n-D-j_{sa}^{ik}+1}^{(l_s-k+1)} \sum_{j_i=j_s+s-1}$$

$$\sum_{n_i=n+k}^n \sum_{n_i=n+k}^{(n_i-j_s+1)} \sum_{n_i=n+k}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-k}^{(j_s=1)}$$

$$\frac{(2 \cdot n_{is} + j_s - n_s - j_i - s - 2 \cdot k)!}{(2 \cdot n_{is} + 2 \cdot j_s - n_s - j_i - n - 2 \cdot k - j_{sa}^s)! \cdot (n + j_{sa}^s - j_s - s)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l_i \leq D + s - n) \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_i - j_{sa}^{ik} + 1 > l_s \wedge$$

$$l_i \leq D + s - n)) \wedge$$

$$(D \geq n < n \wedge I = \mathbb{k} = 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}^i\} \wedge$$

$$s \geq 2 \wedge s = s \Rightarrow$$

$$\begin{aligned}
fz_{j_s, j_i}^{DOSD} &= \sum_{k=1}^{i^{l-1} (j_i - s + 1) l_s + s - k} \sum_{(j_s=2)} \sum_{j_i=s+1} \\
&\sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i - j_s + 1)} \sum_{n_s=n-j_i}^{n_{is} + j_s - j_i} \\
&\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
&\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
&\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
&\frac{(l_s - j_s - k + 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
&\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
&\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!} + \\
&\sum_{k=1}^{i^{l-1} (l_s - k + 1) l_i - k + 1} \sum_{(j_s=2)} \sum_{j_i=l_s+s-k+1} \\
&\sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i - j_s + 1)} \sum_{n_s=n-j_i+1}^{n_{is} + j_s - j_i} \\
&\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
&\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
&\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
&\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
&\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot
\end{aligned}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=i}^l \sum_{(j_s=1)}^{()} \sum_{j_i=s}^{l_i - i^{l+1}}$$

$$\sum_{n_i=n}^n \sum_{(n_i=n-j_i+1)}^{(n_i-j_i+1)}$$

$$\frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - j_i + 1)!} \cdot$$

$$\frac{(n_i - j_i - 1)!}{(n_i + j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_i - j_i - 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_s - n - l_i)! \cdot (n - s)!} -$$

$$\sum_{k=1}^{i^{l-1}} \sum_{(j_s=j_i-s+1)}^{()} \sum_{j_i=s+1}^{l_s+s-k}$$

$$\sum_{n_i=n+k}^n \sum_{(n_i=n+k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s - j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik} - j_i - j_{sa}^{lk})}^{()}$$

$$\frac{(2 \cdot n_{is} + j_s - n_s - j_i - s - 2 \cdot lk)!}{(n_{is} + 2 \cdot j_s - n_s - j_i - n - 2 \cdot lk - j_{sa}^s)! \cdot (n + j_{sa}^s - j_s - s)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

$$\sum_{k=i}^l \sum_{(j_s=1)}^{()} \sum_{j_i=s}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{\binom{()}{}} (n_{ik} = n_i + j_{sa}^s - j_s - j_{sa}^{ik} + 1) n_s = n_{ik} + j_s + j_{sa}^{ik} - j_i - j_{sa}^s - \mathbb{k}$$

$$\frac{(2 \cdot n_i - n_s - j_s - j_i - s - 2 \cdot \mathbb{k} + 2)!}{(2 \cdot n_i - n_s - j_i - n - 2 \cdot \mathbb{k} + 1)! \cdot (n - s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$((D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$(l_i \leq D + s - n) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} = 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^l - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}^l\} \wedge$$

$$s \geq 2 \wedge s = s \Rightarrow$$

$$fzS_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i-l-1} \sum_{(j_s=2)}^{(l_s-k+1)} \sum_{j_i=j_s+s-1}^{l_i-k+1} \sum_{n_i=n}^n \sum_{(n_{is}=n-1)}^{(n_i-j_s+1)} \sum_{(n_s=n-j_i+1)}^{(n_s+j_s-j_i)} \frac{(n_i - n_s - 1)!}{(j_s - 2)! \cdot (n_i - n_s - j_s + 1)!} \cdot \frac{(n_i - n_s - 1)!}{(n_i - j_s - 1)! \cdot (n_{is} + j_s - j_i - 1)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=i}^{()} \sum_{(j_s=1)}^{l_i - i + 1} \sum_{j_i=s} \sum_{n_i=n}^n \sum_{(n_s=n-j_i+1)}^{(n_i-j_i+1)} \frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!}$$

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$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$\sum_{k=1}^{i^{l-1} (l_s - k + 1)} \sum_{(j_s=2)} \sum_{j_i=j_s+s-1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_i+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{ik}+j_s+j_{sa}^{ik}-j_i-l_k)}^{()}$$

$$\frac{(2 \cdot n_{is} + j_s - n_s - j_i - s - 2 \cdot l_k)!}{(2 \cdot n_{is} + 2 \cdot j_s - n_s - j_i - n - 2 \cdot l_k + 1)! \cdot (n + j_s - j_s - s)!}$$

$$\frac{(l_s - k)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=i^l}^{()} \sum_{(j_s=1)} \sum_{j_i=s}$$

$$\sum_{n_i=n+l_k}^{()} \sum_{(n_{ik}=n_i+j_{sa}^s-j_s-j_{sa}^{ik}+1)}^{()} \sum_{n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-l_k}$$

$$\frac{(2 \cdot n_i - n_s - j_s - j_i - s - 2 \cdot l_k + 2)!}{(2 \cdot n_i - n_s - j_i - n - 2 \cdot l_k + 1)! \cdot (n - s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$((D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$D \geq n < n \wedge l = k = 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}^i\}$$

$$s \geq 2 \wedge s = s \Rightarrow$$

$$f_Z S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i^{l-1}(j_i-s+1)} \sum_{(j_s=2)}^{l_s+s-k} \sum_{j_i=l_i+n-D}^{n_i-n} \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\begin{aligned}
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{i-1} \sum_{j_s=2}^{(n_s - l_s - k + 1)} \sum_{j_i=l_s+s-i}^{l_i-k+1} \\
 & \sum_{n_i=n}^{(n_i - j_s)} \sum_{n_s=n-j_s+1}^{n_{is}+j_s-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_s - n_s - 1)!}{(j_i - 2)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{i-1} \sum_{j_s=1}^{(n_s - l_s - k + 1)} \sum_{j_i=l_i+n-D}^{l_i-i+1} \\
 & \sum_{n_i=n}^n \sum_{n_s=n-j_i+1}^{(n_i - j_i + 1)} \\
 & \frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!} \cdot
 \end{aligned}$$

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$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \binom{()}{(j_s=j_i-s+1) j_s+l_s-k} \sum_{j_s+l_s-k}^{l_s+s-k} \sum_{j_s+l_s-k}^{n-D}$$

$$\sum_{n_i=n}^n \sum_{(n_{is}=n+k-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{sa}^{ik}} \sum_{(n_{is}+j_s+j_{sa}^{ik}-j_i-j_{sa}^{ik})}$$

$$\frac{(2 \cdot n_{ik} + j_s - n_s - j_i - 2 \cdot l_s)!}{(2 \cdot n_{is} + 2 \cdot j_s - n_s - j_i - n - 2 \cdot l_s)! \cdot (n + j_{sa}^s - j_s - s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$(D \geq n < D - n + 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < D - n + 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1)) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} = 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}^i\} \wedge$$

$$s \geq 2 \wedge s = s \Rightarrow$$

$$\begin{aligned} z S_{j_s, j_i}^{DOSD} &= \sum_{k=1}^{i^{l-1}} \sum_{(j_s=2)}^{(l_i+n-D-s)} \sum_{j_i=l_i+n-D}^{l_i-k+1} \\ &\sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ &\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\ &\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\ &\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\ &\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \end{aligned}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{i-1} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)} \sum_{j_i=j_s+s-1}^{l_i-k+1}$$

$$\sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_s=n-j_i+1)}^{n_{is}+j_s}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_s - j_i + 1)!} \cdot$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot$$

$$\frac{(n_s - j_i - n - 1)!}{(n_s - j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_i - j_s - k - 1)!}{(l_i - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s - l_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{i-1} \sum_{(j_s=1)}^{()} \sum_{j_i=l_i+n-D}^{l_i-i+1}$$

$$\sum_{n_i=n}^n \sum_{(n_s=n-j_i+1)}^{(n_i-j_i+1)}$$

$$\frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

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$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)} \sum_{j_i=j_s+s-1} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}}^{()} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_{sa}^{ik})} \frac{(2 \cdot n_{is} + j_s - n_s - j_i - s - 2)}{(2 \cdot n_{is} + 2 \cdot j_s - n_s - j_i - n - 2 \cdot k - j_{sa}^{ik}) \cdot (n + j_{sa} - s)!} \cdot \frac{(l_s - k - 1)!}{(j_i - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D)}{(D + j_s - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_i - s + 1 \wedge$

$j_s + s - 1 \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa}^{ik} = l_{ik} \wedge l_{sa} + j_{sa} - s > l_{sa} \wedge$

$D + s - n < l_i \leq l_s + l_s + s - n - 1 \wedge$

$D > n < n \wedge = k =$

$j_{sa}^s < j_{sa}^i - 1 \wedge$

$s: \{j_{sa}^s\} \wedge$

$s \geq 2 \wedge s =$

$$fz S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i^{l-1} (j_i - s + 1)} \sum_{(j_s=2)}^{l_{sa} + s - k - j_{sa} + 1} \sum_{j_i=l_i+n-D} \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\begin{aligned}
 & \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(l_i)!}{(D + j_i - n - l_i)! \cdot (j_i)!} + \\
 & \sum_{k=1}^{i-1} \sum_{s=2}^{(l_{sa}-k-j_{sa}+2)} \sum_{j=0}^{l_i-k+1} \frac{(n_{is}-n_s-j_i+1) \cdot (n_{is}+j_s-j_i)}{(n_{is}=n-j_s+1) \cdot (n_s=n-j_i+1)} \\
 & \frac{(n_i - n_{is} - 1)!}{(i - l_i - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{i-1} \sum_{j_s=1}^{()} \sum_{j_i=l_i+n-D}^{l_i-i+1} \\
 & \sum_{n_i=n}^n \sum_{(n_s=n-j_i+1)}^{(n_i-j_i+1)}
 \end{aligned}$$

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$$\frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \binom{D+l_s+s-n-l_i}{(j_s=j_i+k+1)} \sum_{j_i=l_i+n-k}^{l_{sa}+s-j_{sa}+1} \binom{l_{sa}+s-j_{sa}+1}{j_i=l_i+n-k}$$

$$\sum_{n_i=n+k}^n \binom{n}{n_i=n+k} \sum_{n_s=n-k}^{(n_i-j_s+1)} \binom{(n_i-j_s+1)}{n_s=n-k}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{lk}} \binom{D+l_s+s-n-l_i}{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{lk}} \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{lk}} \binom{(n_i-j_s+1)}{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{lk}}$$

$$\frac{(2 \cdot n_{is} + j_s - j_i - 2 \cdot lk)!}{(2 \cdot n_{is} + j_s - n_s - j_i - 2 \cdot lk - j_{sa}^s)! \cdot (n + j_{sa}^s - j_s - s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1$$

$$1 \leq j_s \leq j_s - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i$$

$$l_{ik} - j_{sa}^{lk} + 1 = l_s \wedge l_{sa} + j_{sa}^{lk} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - 1 \wedge l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = lk = 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}^i\} \wedge$$

$$s \geq 2 \wedge s = s \Rightarrow$$

$$\begin{aligned}
fz_{j_s, j_i}^{DOSD} &= \sum_{k=1}^{i^{l-1}} \sum_{(j_s=2)}^{(l_i+n-D-s)} \sum_{j_i=l_i+n-D}^{l_i-k+1} \\
&\sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i}^{n_{is}+j_s-j_i} \\
&\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
&\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
&\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
&\frac{(l_s - j_s - k + 1)!}{(l_s - j_s - 2)!} \cdot \\
&\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
&\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!} + \\
&\sum_{k=1}^{i^{l-1}} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{sa}-k-j_{sa}+2)} \sum_{j_i=j_s+s-1}^{l_i-k+1} \\
&\sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \\
&\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
&\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
&\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
&\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
&\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot
\end{aligned}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{l_i} \sum_{(j_s=1)}^{()} \sum_{j_i=l_i+n-D}^{l_i-i+1}$$

$$\sum_{n_i=n}^n \sum_{(n_i=n-j_i+1)}^{(n_i-j_i+1)}$$

$$\frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - j_i + 1)!} \cdot$$

$$\frac{(n_i - 1)!}{(n_i + j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_i - j_s - 1)!}{(l_i - j_s - l_s + 1)! \cdot (j_i - s)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

$$\sum_{k=1}^{l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(n-k-j_{sa}+2)} \sum_{j_i=j_s+s-1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_i=n+k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-k)}^{()}$$

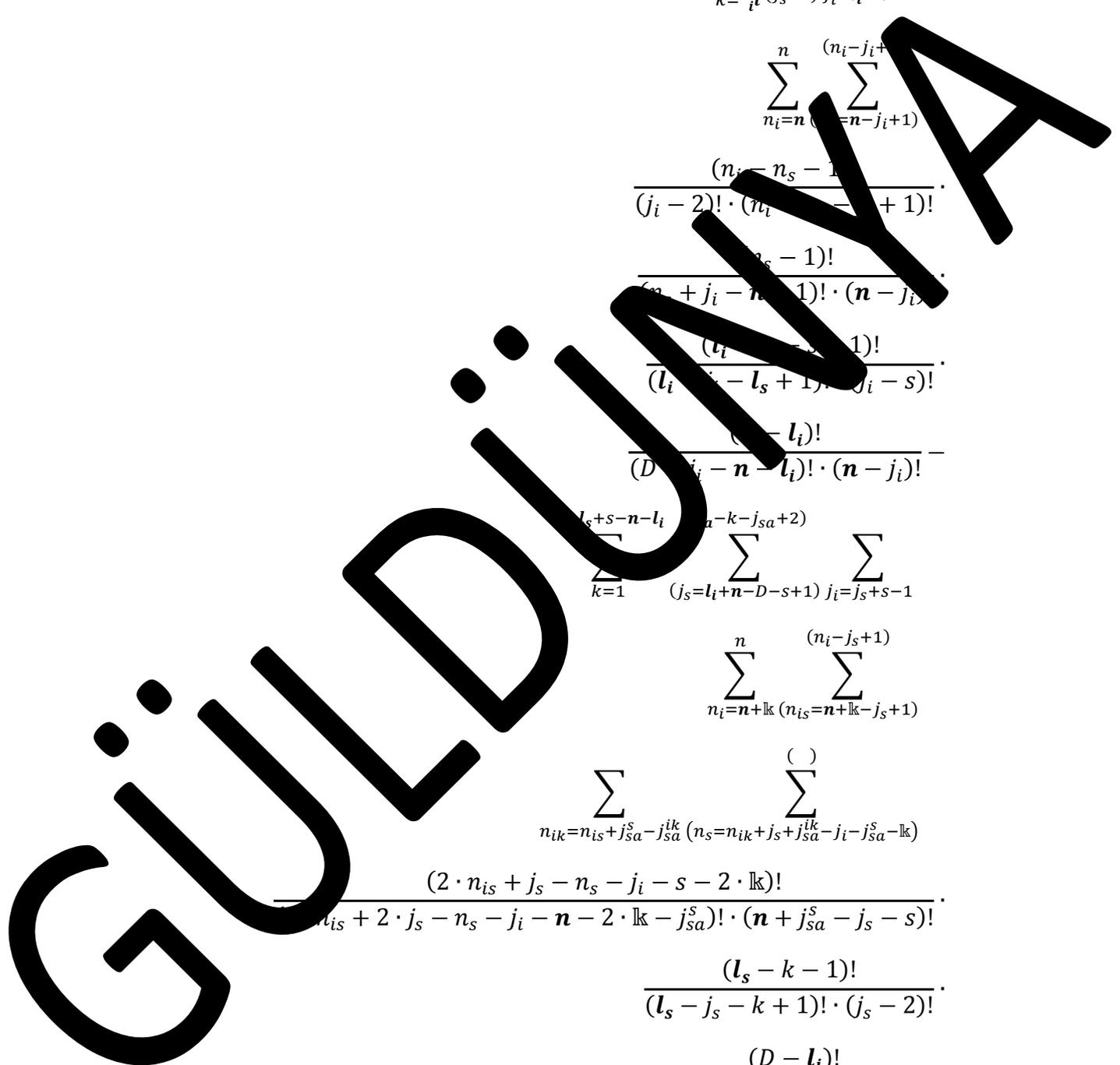
$$\frac{(2 \cdot n_{is} + j_s - n_s - j_i - s - 2 \cdot k)!}{(n_{is} + 2 \cdot j_s - n_s - j_i - n - 2 \cdot k - j_{sa}^s)! \cdot (n + j_{sa}^s - j_s - s)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_i - s + 1 \wedge$



$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} = 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}^i\} \wedge$$

$$s \geq 2 \wedge s = s \Rightarrow$$

$$fz_{j_s, j_i}^{SDOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(j_i-1)} \sum_{j_i=l_{ik}+s-k-j_{sa}+1}^{l_{ik}+s-k-j_{sa}+1} \frac{(n_i - n_{is} - 1)!}{(j_s - k)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j_i=l_{ik}+s-k-j_{sa}^{ik}+2}^{l_{sa}+s-k-j_{sa}+1} \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - 1)!}{(j_s + l_i - j_i - 1)! \cdot (j_i - j_s + 1)!}$$

$$\frac{(n - l_i)!}{(n - j_i - 1)! \cdot (n - j_i)!}$$

$$\sum_{i=1}^n \sum_{j_s=1}^{l_{sa}} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{sa}+n+s-D-j_{sa}+1}$$

$$\sum_{n_i=n}^n \sum_{(n_s=n-j_i+1)}^{(n_i-j_i+1)}$$

$$\frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_i-s+1)}^{()} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{ik}+s-k-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{\binom{()}{n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-k}} \frac{(2 \cdot n_{is} + j_s - n_s - j_i - s - 2 \cdot k)!}{(2 \cdot n_{is} + 2 \cdot j_s - n_s - j_i - n - 2 \cdot k - j_{sa}^s)! \cdot (n + j_{sa}^s - j_s - s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa}^{ik} \wedge l_i + j_s - s = l_s \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1$$

$$D \geq n < n \wedge l = k = 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}^i\} \wedge$$

$$s \geq 2 \wedge s = s =$$

$$S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i^{l-1} (l_{sa}+n-D-j_{sa})} \sum_{\binom{()}{j_s=2}} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{sa}+s-k-j_{sa}+1} \sum_{n_i=n}^n \sum_{\binom{()}{n_{is}=n-j_s+1}}^{(n_i-j_s+1)} \sum_{\binom{()}{n_s=n-j_i+1}}^{n_{is}+j_s-j_i} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\begin{aligned}
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{i-1} \sum_{(j_s=l_{sa}+n-D-j_s+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j_i=j_s-1}^{l_{sa}+n-k-j_{sa}+1} \frac{(n_i - j_s + 1)!}{(j_s - 1)! \cdot (n_i - n_s + 1)!} \cdot \\
 & \sum_{n_i=n}^n \sum_{(n_s=n_i+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n-j_i} \frac{(n_{is} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{i-1} \sum_{(j_s=1)}^{()} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{sa}+s-i-l-j_{sa}+1} \frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot
 \end{aligned}$$

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$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j_i=j_s+s-1}^{(j_s+1)} \frac{(2 \cdot n_{is} + 2 \cdot j_s - n_s - j_i - n - l_s - k - j_{sa}^s) \cdot (n + j_{sa}^s - j_s - s)!}{(l_s - k - 1)! \cdot (j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s \leq D - n + 1$$

$$1 \leq j_s \leq j_i - s + 1$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \wedge$$

$$D \geq n < n \wedge l = k = 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^l - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}^l\} \wedge$$

$$s \geq 2 \wedge s = s \Rightarrow$$

$$fz_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i-l-1} \sum_{(j_s=2)}^{(j_s+1)} \sum_{j_i=l_s+n+s-D-j_{sa}}^{l_s} \sum_{n_i=n}^{(n_i-n-j_s+1)} \sum_{(n_{is}=n-j_s+1)}^{(n_{is}+j_s-j_i)} \sum_{n_s=n-j_i+1}^{(n_s-n-j_i+1)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{i-l-1} \sum_{(j_s=2)}^{(l_s-k+1)} \sum_{j_i=l_s+s-k-j_{sa}+1}^{l_{sa}+s-k-j_{sa}+1}$$

$$\sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - s + 1)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(n - l_i)!}{(n - l_i - 1)! \cdot (n - j_i)!}$$

$$\sum_{j_s=1}^{l_s} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{sa}+n+s-D-j_{sa}+1} \binom{l_{sa}+n+s-D-j_{sa}+1}{j_s}$$

$$\sum_{n_i=n}^n \sum_{(n_s=n-j_i+1)}^{(n_i-j_i+1)}$$

$$\frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_i-s+1)}^{l_s+s-k} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{sa}+n+s-k}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{()} (n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-k)$$

$$\frac{(2 \cdot n_{is} + j_s - n_s - j_i - s - 2 \cdot k)!}{(2 \cdot n_{is} + 2 \cdot j_s - n_s - j_i - n - 2 \cdot k - j_{sa}^s)! \cdot (n + j_{sa}^s - j_s - s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - l_s)!}$$

$$\frac{(D - l_s)!}{(D + j_i - n - l_s)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - l_{ik} \wedge l_i + j_{sa} - s = l_s \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1)) \wedge$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1)) \wedge$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1)) \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = k = 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}^i\} \wedge$$

$$s \geq 2 \wedge s = s \Rightarrow$$

$$\begin{aligned}
 f_{zS} S_{j_s, j_i}^{DOSD} = & \sum_{k=1}^{i^{l-1} (l_{sa} + n - D - j_{sa})} \sum_{(j_s=2)}^{l_{sa} + s - k - j_{sa} + 1} \sum_{j_i = l_{sa} + n + s - D - j_{sa}} \\
 & \sum_{n_i = n}^n \sum_{(n_{is} = n - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_s = n - j_i}^{n_{is} + j_s - j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - j_s - k + 1)!}{(l_s - j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{i^{l-1} (l_s - k - 1)} \sum_{(j_s = l_{sa} + n - D - j_{sa} + 1)}^{l_{sa} + s - k - j_{sa} + 1} \sum_{j_i = j_s + s - 1} \\
 & \sum_{n_i = n}^n \sum_{(n_{is} = n - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_s = n - j_i + 1}^{n_{is} + j_s - j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot
 \end{aligned}$$

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$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{l_i} \sum_{j_s=1}^{()} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{sa}+s-i-l-j_{sa}+1}$$

$$\sum_{n_i=n}^n \sum_{(n_i=n-j_i+1)}^{(n_i-j_i+1)}$$

$$\frac{(n_s - n_s - 1)!}{(j_i - 2)! \cdot (n_i - j_i + 1)!}$$

$$\frac{(n_s - 1)!}{(n + j_i - n_s - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_i - j_s - 1)!}{(l_i - j_s - 1)! \cdot (j_i - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

$$\sum_{k=1}^{D+j_i-s-n-l_i} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{s-k-1} \sum_{j_i=j_s+s-1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_i=n+k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-k)}^{()}$$

$$\frac{(2 \cdot n_{is} + j_s - n_s - j_i - s - 2 \cdot k)!}{(n_{is} + 2 \cdot j_s - n_s - j_i - n - 2 \cdot k - j_{sa}^s)! \cdot (n + j_{sa}^s - j_s - s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq j_s \leq j_i - s + 1 \wedge$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa}^s = j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, k, j_{sa}^i\} \wedge$$

$$s = 2 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{D-n+1} \sum_{j_i=l_i+n-D-j_{sa}^{ik}+1}^{(j_i-s+1)} \sum_{j_i=l_i+n-D}^{l_{ik}+k+1} \sum_{n_i=n+k}^n \sum_{n_{is}=n+k-j_s+1}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k} \frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{D-n+1} \sum_{j_s=l_{ik}+n-D-j_{sa}^{ik}+1}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j_i=l_{ik}+s-k-j_{sa}^{ik}+2}^{l_i-k+1} \sum_{n_i=n+k}^n \sum_{n_{is}=n+k-j_s+1}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k}$$

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$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i - 1)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - 1)!}{(j_s + l_i - j_i - 1)! \cdot (j_i - j_s - 1)!} \cdot \frac{(n - l_i)!}{(n - l_i - 1)! \cdot (n - j_i)!} \cdot \sum_{k=0}^{l_s + s - n - j_s} \binom{l_s + s - n - j_s}{k} \sum_{j_i = l_i + n - D}^{j_{sa}^{ik} + 1} \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{\mathbb{k} = n_{is} + j_{sa}^s - j_{sa}^{ik}}^{(n_s = n_{ik} + j_s + j_{sa}^{ik} - j_i - j_{sa}^s - \mathbb{k})} \frac{(2 \cdot n_{is} + j_s - n_s - j_i - s - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_s - n_s - j_i - n - 2 \cdot \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - j_s - s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$l_i - s + 1 \wedge$

$j_s + s - 1 \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$

$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$

$$j_{sa}^s = j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s = 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$fz_{j_s, j_i}^{SDOSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_i+n-D-s)} \sum_{l_i-k+1}^{l_i-k+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_i+1)} \sum_{n_s=n-j_i+1}^{n_{is}-j_i-\mathbb{k}} \frac{(n_i-j_i-1)!}{(j_i-2)! \cdot (n_i-j_i-j_s+1)!} \cdot \frac{(n_i-n_s-1)!}{(j_i-j_s-1)!} \cdot \frac{(n_s-1)!}{(n_s-j_i-n-1)! \cdot (n-j_i)!} \cdot \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \frac{(l_i-l_s-s+1)!}{(j_s+l_i-j_i-l_s)! \cdot (j_i-j_s-s+1)!} \cdot \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \sum_{k=1}^{D-n+1} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j_i=j_s+s-1}^{l_i-k+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}} \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_s-1)!}{(j_i-j_s-1)! \cdot (n_{is}+j_s-n_s-j_i)!}$$

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$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+l_s-k+1)}^{(l_{ik}-l_i-k+2)} \sum_{(j_i=j_s+l_s-k)}^{(D-s+1)} \sum_{n_i=n+k}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{is}=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-k)}^{(n_{is}=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-k)} \sum_{(n_{is}=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-k)}^{(n_{is}=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-k)}$$

$$\frac{(2 \cdot n_{is} + j_s - l_i - j_i - 2 \cdot k)!}{(2 \cdot n_{is} + 2 \cdot j_s - n_s - j_i - n - 2 \cdot k - j_{sa}^s)! \cdot (n + j_{sa}^s - j_s - s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_s + 1 \wedge$$

$$j_s + 1 \leq j_i \leq j_i + 1 \wedge$$

$$l_{ik} - j_{sa}^{ik} + j_{sa}^s > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$n_{is} \geq n_{ik} \wedge I = k \geq 0 \wedge$$

$$j_{sa}^s = j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, k, j_{sa}^i\} \wedge$$

$$s = 2 \wedge s = s + k \wedge$$

$lk_z: z = 1 \Rightarrow$

$$f_z S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(j_i-s+1)} \sum_{j_i=l_{ik}+n+s-D-j_{s_a}^{ik}}^{l_s+s-k}$$

$$\sum_{n_i=n+lk}^n \sum_{(n_{is}=n+lk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-lk}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_i - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(n - l_s - s + 1)!}{(n + l_i - j_i - s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)} \sum_{j_i=l_s+s-k+1}^{l_{ik}+s-k-j_{s_a}^{ik}+1}$$

$$\sum_{n_i=n+lk}^n \sum_{(n_{is}=n+lk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-lk}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

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$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_i-s+1)}^{(\cdot)} \sum_{j_i=l_{ik}+n+s-D-j_{sa}^{ik}}^{l_s+s-k}$$

$$\sum_{n_i=n+1}^n \sum_{(j_s=j_s+1)}^{(\cdot)} \sum_{(n+j_{sa}^s-j_s-s)!}^{(\cdot)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}}^{(\cdot)} \sum_{(n_{ik}+j_s^{ik}-j_i-j_{sa}^s-k)}^{(\cdot)}$$

$$\frac{(2 \cdot n_{is} + j_s - j_i - 2 \cdot k)!}{(2 \cdot n_{is} + 2 \cdot j_s - n_s - j_i - n - k - j_{sa}^s) \cdot (n + j_{sa}^s - j_s - s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$
 $2 \leq j_s \leq j_i - s + 1$
 $j_s - s - 1 \leq j_i \leq n \wedge$
 $l_{ik} = j_{sa}^{ik} + 1 > l_s \wedge j_{sa}^{ik} = l_{ik} \wedge$
 $D \geq n < n \wedge l_s > D - n + 1 \wedge$
 $j_{sa}^s = j_{sa}^s - 1$
 $s: (j_{sa}^s, k, j_s) \wedge$
 $= 2 \wedge s = s + k \wedge$
 $k_z: z = 1 \Rightarrow$

$$f_z^{S_{j_s, j_i}^{DOSD}} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_{ik}+n-D-j_{sa}^{ik})} \sum_{j_i=l_{ik}+n+s-D-j_{sa}^{ik}}^{l_{ik}+s-k-j_{sa}^{ik}+1}$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-l_k} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{D-n+1} \sum_{j_i=j_s+1}^{(l_s-k+1)} \sum_{j_i=j_s+s-1}^{l_{ik}+s-k-j_{sa}^{ik}+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-l_k} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

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$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_s-k+1)} \sum_{j_i=j_s+s-1}^{(n_i-j_s+1)} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_{sa}^s-k)} \frac{(2 \cdot n_{is} + j_s - n_s - j_i - s - 2 \cdot k)!}{(2 \cdot n_{is} + 2 \cdot j_s - n_s - j_i - n - 2 \cdot k - j_{sa}^s) \cdot (n + j_{sa}^s - s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - k)!}{(D + j_s - n - l_i)! \cdot (n - j_i)!}$$

$$\begin{aligned} & ((D \geq n < n \wedge l_s > D - n + 1 \wedge \\ & 2 \leq j_s \leq j_i - s + 1 \wedge \\ & j_s + s - 1 \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik}) \vee \\ & (D \geq n < n \wedge l_s > D - n + 1 \wedge \\ & 2 \leq j_s \leq j_i - s + 1 \wedge \\ & j_s + s - 1 \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik}) \vee \\ & ((D \geq n < n \wedge l_s > D - n + 1 \wedge \\ & 2 \leq j_s \leq j_i - s + 1 \wedge \\ & j_s + s - 1 \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik})) \wedge \\ & D \geq n < n \wedge I = k \geq 0 \wedge \\ & j_{sa}^s = j_{sa}^i - 1 \wedge \end{aligned}$$

$$s: \{j_{sa}^s, k, j_{sa}^i\} \wedge$$

$$s = 2 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$fz S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(j_i-s+1)} \sum_{j_i=l_i+n}^{l_s+s-k} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+l_s-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k} \frac{(j_s-2)! \cdot (n_i-n_{is}-1)!}{(j_i-j_s-1)! \cdot (n_{is}+j_s-n_s-j_i)!} \cdot \frac{(n_s-1)!}{(n_s+j_i-1)! \cdot (n-j_i)!} \cdot \frac{(l_s-k-1)!}{(l_s+j_s-k+1)! \cdot (j_s-2)!} \cdot \frac{(l_i-l_s-s+1)!}{(j_s+l_i-j_i-l_s)! \cdot (j_i-j_s-s+1)!} \cdot \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)} \sum_{j_i=l_s+s-k+1}^{l_i-k+1} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k} \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_s-1)!}{(j_i-j_s-1)! \cdot (n_{is}+j_s-n_s-j_i)!} \cdot \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!}$$

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$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_i-s+1)}^{()} \sum_{j_i=n-D}^{l_s+s-k} \sum_{n_i=n}^n \sum_{(n_{is}=n+k-j_s+1)}^{()} \sum_{(n_{ik}=n_{is}-j_{sa}^{ik} + j_s + j_{sa}^{ik} - j_i - j_{sa}^{ik})} \frac{(2 \cdot n_{is} + j_s - n_s - j_i - 2 \cdot k)!}{(2 \cdot n_{is} + 2 \cdot j_s - n_s - j_i - n - 2 \cdot k)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\begin{aligned} & ((D \geq n < n \wedge l_s > D - n + 1 \wedge \\ & 2 \leq j_s \leq j_i - s + 1 \wedge \\ & j_s + s - 1 \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik}) \vee \\ & (D \geq n < n \wedge l_s > D - n + 1 \wedge \\ & 2 \leq j_s \leq j_i - s + 1 \wedge \\ & j_s + s - 1 \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik}) \vee \\ & (D \geq n < n \wedge l_s > D - n + 1 \wedge \\ & 2 \leq j_s \leq j_i - s + 1 \wedge \end{aligned}$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik}) \wedge$$

$$D \geq n < n \wedge I = k \geq 0 \wedge$$

$$j_{sa}^s = j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, k, j_{sa}^i\} \wedge$$

$$s = 2 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$fz S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D-s)}^{(l_i+n-D-s)} \sum_{j_i=l_i+n-D}^{1} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s)} \sum_{n_s=n-j_i+1}^{(j_s-j_i-k)} \frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{D-n+1} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)} \sum_{j_i=j_s+s-1}^{l_i-k+1} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_s - 1)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s + 1)!}{(j_s + l_i - j_i - 1)! \cdot (j_i - j_s + 1)!} \cdot \frac{(n - l_i)!}{(n - j_i - 1)! \cdot (n - j_i)!} \cdot \sum_{k=1}^{l_s + s - n - j_s} \sum_{j_s = l_i + k - s + 1}^{n - s + 1} \sum_{j_i = j_s + s - 1}^n \sum_{n_i = n + \mathbb{k}}^n \sum_{n_{is} = n + \mathbb{k} - j_s + 1}^{(n_i - j_s + 1)} \sum_{\substack{(\cdot) \\ k = n_{is} + j_{sa}^s - j_{sa}^{ik} (n_s = n_{ik} + j_s + j_{sa}^{ik} - j_i - j_{sa}^s - \mathbb{k})}} \frac{(2 \cdot n_{is} + j_s - n_s - j_i - s - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_s - n_s - j_i - n - 2 \cdot \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - j_s - s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$l_i - l_s + 1 \wedge$

$j_s + s - 1 \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$

$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$

$$j_{sa}^s = j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s = 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(j_i-s+1)} \sum_{j_i=l_{sa}+s-k-j_{sa}}^{l_{sa}+s-k-j_{sa}} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j+1)} \sum_{n_s=n-j_i+1}^{n_{is}-j_i-\mathbb{k}}$$

$$\frac{(n_i - j - 1)!}{(n_i - j_s + 1)!} \cdot \frac{(n_i - n_s - 1)!}{(n_i - j_s - 1)!} \cdot \frac{(j_i - 1)!}{(j_i - 1)!} \cdot \frac{(n_{is} + j_s - n_s - j_i)!}{(n_s - 1)!} \cdot \frac{(n_s - 1)!}{(n_s - j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{D-n+1} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_{sa}-k-j_{sa}+2)} \sum_{j_i=l_{sa}+s-k-j_{sa}+2}^{l_i-k+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

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$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s - 1)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_i+k+1)}^{(l_s+l_s-s-j_{sa}+1)} \sum_{j_i=l_i+n-k}^{(n-l_i-j_s+1)}$$

$$\sum_{n_i=n+k}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{(n_i=n+k)}^{(n_i-j_s+1)} \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)}$$

$$\frac{(2 \cdot n_{is} + j_s - j_i - 2 \cdot k)!}{(2 \cdot n_{is} + j_s - j_i - 2 \cdot k - j_{sa}^s)! \cdot (n + j_{sa}^s - j_s - s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$((D > n < n \wedge l_s > n + 1) \wedge$

$D \geq n < n \wedge l_s > D - 1 + 1 \wedge$

$2 \leq j_i < j_i - s + 1$

$j_s + s - 1 \leq j_i \leq n \wedge$

$-j_{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$

$D \geq n < n \wedge I = k \geq 0 \wedge$

$j_{sa}^s = j_{sa}^i - 1 \wedge$

$s: \{j_{sa}^s, k, j_{sa}^i\} \wedge$

$$s = 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$fz S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_i+n-D-s)} \sum_{j_i=l_i+n-D}^{l_i-k+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_s - l_s - s + 1)!}{(j_s + j_i - l_s - 1)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{D-n+1} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{sa}-k-j_{sa}+2)} \sum_{j_i=j_s+s-1}^{l_i-k+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

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$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{sa}-k-j_{sa}+2)} \sum_{j_i=j_s+s-1}^{(j_s+1)}$$

$$\sum_{n_i=n}^n \sum_{(n+l_s-j_s+1)}^{(j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+1}^{(j_s)} \sum_{(n_{ik}+j_s-k-j_i-j_{sa}^s-k)}^{(j_s)}$$

$$\frac{(2 \cdot n_{is} + j_s - j_i - 2 \cdot k)!}{(2 \cdot n_{is} + 2 \cdot j_s - n_s - j_i - n - k - j_{sa}^s) \cdot (n + j_{sa}^s - j_s - s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > D - n + 1$

$2 \leq j_s \leq j_i - s + 1$

$j_s - s - 1 \leq j_i < n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge j_{sa}^{ik} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$D \geq n \wedge I = k \geq 1$

$j_{sa}^s = j_{sa}^i - 1$

$s: \{j_{sa}, k_s\} \wedge$

$s = 2 \wedge s = s + k \wedge$

$k_z: z = 1 \Rightarrow$

$$f_z^{DOSD}_{j_s, j_i} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(j_i-s+1)} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{ik}+s-k-j_{sa}^{ik}+1}$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-l_k} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{l_i+1} \sum_{(j_s-j_{sa}^{ik}+1)}^{(l_{ik}-k-1)+2} \sum_{j_i=l_{ik}+s-k-j_{sa}^{ik}+2}^{l_{sa}+s-k-j_{sa}^{ik}+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-l_k} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -
 \end{aligned}$$

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$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_i-s+1)}^{(\quad)} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{ik}+s-k-j_{sa}^{ik}+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}-j_{sa}^{ik}}^{(\quad)} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_{sa}^s-\mathbb{k})}^{(\quad)} \frac{(2 \cdot n_{is} + j_s - n_s - j_i - s - 2 \cdot \mathbb{k} - j_{sa}^{ik})!}{(2 \cdot n_{is} + 2 \cdot j_s - n_s - j_i - n - 2 \cdot \mathbb{k} - j_{sa}^{ik})! \cdot (n + j_{sa}^{ik} - s)! \cdot (l_s - k - 1)! \cdot (j_s - k + 1)! \cdot (j_s - 2)! \cdot (D - j_s + 1)!} \cdot (D + j_s - n - l_i)! \cdot (n - j_i)!$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq j_s \leq j_i - s + 1 \wedge$

$j_s + s - 1 \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} > l_{ik} \wedge l_{sa} - j_{sa} - s = l_{sa} \wedge$

$D \geq n < n \wedge I = \dots \geq 0 \wedge$

$j_s = j_{sa}^i - 1$

$s: \{ \dots, \mathbb{k}, j_{sa}^i \} \wedge$

$s = 2 \wedge \dots = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 1 \Rightarrow$

$$f_z S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_{sa}+n-D-j_{sa})} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{sa}+s-k-j_{sa}+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(l_i)!}{(D + j_i - n - l_i)! \cdot (j_i)!} +$$

$$\sum_{k=1}^{D-n+1} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{(j_i=j_s+s-1)}^{(l_{sa}+s-k-j_{sa}+1)}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n-j_s+1)} \sum_{n_s=n-j_i+1}^{(n_{is}+j_s-j_i-k)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_i - j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j_i=j_s+s-1}^{(l_{sa}+s-k-j_{sa}+1)}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{()}^{()} (n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-k)$$

$$\frac{(2 \cdot n_{is} + j_s - n_s - j_i - s - 2 \cdot k)!}{(2 \cdot n_{is} + 2 \cdot j_s - n_s - j_i - n - 2 \cdot k - j_{sa}^s)! \cdot (n + j_{sa}^s - j_s - s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - \dots)!}$$

$$\frac{(D - l_s)}{(D + j_i - n - l_s)! \cdot (n - j_i)!}$$

$((D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq j_s \leq j_i - s + 1 \wedge$

$j_s + s - 1 \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \vee$

$(D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq j_s \leq j_i - s + 1 \wedge$

$j_s + s - 1 \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \vee$

$(D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq j_s \leq j_i - s + 1 \wedge$

$j_s + s - 1 \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \vee$

$D \geq n < n \wedge k \geq 1 \wedge$

$j_s^s \leq j_{sa}^s - 1 \wedge$

$s: \{j_{sa}^s, k, j_i^s\} \wedge$

$s = z \wedge s = s + k \wedge$

$k_z: z = 1 \Rightarrow$

$$f_z S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(j_i-s+1)} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_s+s-k}$$

$$\begin{aligned}
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-l_k} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=1}^{D-n+1} \sum_{l_s=l_s+n-D}^{l_s-k+1} \sum_{j_i=l_s+s-k+1}^{l_{sa}+s-k-j_{sa}+1} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-l_k} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -
\end{aligned}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_i-s+1)}^{(\quad)} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_s+s-k} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{(\quad)} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_{sa}^s-\mathbb{k})}^{(\quad)} \frac{(2 \cdot n_{is} + j_s - n_s - j_i - s - 2)}{(2 \cdot n_{is} + 2 \cdot j_s - n_s - j_i - n - 2 \cdot \mathbb{k} - j_{sa}^s) \cdot (n + j_{sa} - s)!} \cdot \frac{(l_s - k - 1)!}{(j_i - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D)}{(D + j_s - n - l_i)! \cdot (n - j_i)!}$$

$$\begin{aligned} & ((D \geq n < n \wedge l_s > D - n + 1 \wedge \\ & 2 \leq j_s \leq j_i - s + 1 \wedge \\ & j_s + s - 1 \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee \\ & (D \geq n < n \wedge l_s > D - n + 1 \wedge \\ & 2 \leq j_s \leq j_i - s + 1 \wedge \\ & j_s + s - 1 \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee \\ & ((D \geq n < n \wedge l_s > D - n + 1 \wedge \\ & 2 \leq j_s \leq j_i - s + 1 \wedge \\ & j_s + s - 1 \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa})) \wedge \\ & D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge \\ & j_{sa}^s = j_{sa}^i - 1 \wedge \\ & s: \{j_{sa}^s, \mathbb{k}, j_{sa}^i\} \wedge \end{aligned}$$

$$s = 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z^{S_{j_s, j_i}^{DOSD}} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_{sa}+n-D-j_{sa})} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{sa}+s-k-j_{sa}+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_s - l_s + 1)!}{(j_s + j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{D-n+1} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_s-k-1)} \sum_{j_i=j_s+s-1}^{l_{sa}+s-k-j_{sa}+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

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$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_s-k-1)} \sum_{j_i=j_s+s-1}^{n-j_s+1}$$

$$\sum_{n_i=n}^{n-j_s+1}$$

$$\sum_{n_{ik}=n_{is}+j_s-1}^{n_{ik}+j_s-k-j_i-j_{sa}^s-k}$$

$$\frac{(2 \cdot n_{is} + j_s - j_i - 2 \cdot k)!}{(2 \cdot n_{is} + 2 \cdot j_s - n_s - j_i - n - k - j_{sa}^s) \cdot (n + j_{sa}^s - j_s - s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s \leq D - n + 1$

$1 \leq j_s \leq j_i - s + 1$

$j_s - s - 1 \leq j_i < n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s - j_{sa}^{ik} + j_{sa}^{ik} - l_{ik} \wedge$

$1 \leq D + j_i - n \wedge$

$D \geq n < n \wedge l_s - k > 1 \wedge$

$j_{sa}^s = j_{sa}^{l_s} - 1 \wedge$

$s: \{j_{sa}^s, k, j_i\} \wedge$

$s = 2 \wedge s = s + k \wedge$

$k_z: z = 1 \Rightarrow$

$$fz S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(j_i-s+1)} \sum_{j_i=s+1}^{l_{ik}+s-k-j_{sa}^{ik}+1}$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-l_k} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=2}^{l_i-1} \sum_{j_i=l_{ik}+s-k-j_{sa}^{ik}+2}^{(l_{ik}-j_{sa}^{ik}+2)} \sum_{j_i=l_{ik}+s-k-j_{sa}^{ik}+2}^{l_i-k+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-l_k} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +
 \end{aligned}$$

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$$\begin{aligned}
 & \sum_{k=i}^{\binom{()}{l}} \sum_{j_s=1}^{l-i+1} \sum_{j_i=s}^{l-i+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_s=n-j)}^{(n_i-j_i-l_k+1)} \\
 & \frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n_s - 1)! \cdot (n_s - j_i)!} \cdot \frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s - 1)! \cdot (j_i - s)!} \cdot \frac{\binom{()}{l}}{(D + j_i - n - l_i)! \cdot (n - s)!} \\
 & \sum_{k=1}^1 \sum_{j_i=s+1}^{\binom{()}{j_i-s+1}} \sum_{j_i=s+1}^{l_{ik}+s-k-j_{sa}^{ik}+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-l_k)}^{\binom{()}{}} \\
 & \frac{(2 \cdot n_{is} + j_s - n_s - j_i - s - 2 \cdot l_k)!}{(2 \cdot n_{is} + 2 \cdot j_s - n_s - j_i - n - 2 \cdot l_k - j_{sa}^s)! \cdot (n + j_{sa}^s - j_s - s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \\
 & \sum_{k=i}^{\binom{()}{l}} \sum_{j_s=1}^{\binom{()}{}} \sum_{j_i=s}^{\binom{()}{}}
 \end{aligned}$$

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$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{\binom{(\cdot)}{n_{ik}=n_i+j_{sa}^s-j_s-j_{sa}^{ik}+1}} \sum_{n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-\mathbb{k}} \frac{(2 \cdot n_i - n_s - j_s - j_i - s - 2 \cdot \mathbb{k} + 2)!}{(2 \cdot n_i - n_s - j_i - \mathbf{n} - 2 \cdot \mathbb{k} + 1)! \cdot (\mathbf{n} - s)!} \cdot \frac{(D - l_i)!}{(D + s - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_i \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D \geq \mathbf{n} < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa}^s = j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s = 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\sum_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j_i=j_s+s-1}^{l_i-k+1} \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=i}^{l_i} \sum_{(j_s=1)}^{l_i - i^{l+1}} \sum_{j_i=s}$$

$$\sum_{n_i=n+k}^n \sum_{(j_i=k+1)}^{(j_i-k+1)}$$

$$\frac{(n_s - n_s - 1)!}{(i - 2)! \cdot (n_s - j_i + 1)!} \cdot$$

$$\frac{(n_s - n - 1)!}{(n - j_i)!} \cdot$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - j_s - s)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - s)!} -$$

$$\sum_{k=1}^{i^{l-1} (l_{ik} - k - j_{sa}^{ik} + 2)} \sum_{(j_s=2)} \sum_{j_i=j_s+s-1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_i=n+k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s - j_{sa}^{ik} (n_s=n_{ik}+j_s+j_{sa}^{ik} - j_i - j_{sa}^s - k)} \sum_{()}$$

$$\frac{(2 \cdot n_{is} + j_s - n_s - j_i - s - 2 \cdot k)!}{(2 \cdot n_{is} + 2 \cdot j_s - n_s - j_i - n - 2 \cdot k - j_{sa}^s)! \cdot (n + j_{sa}^s - j_s - s)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

GÜLDENMYA

$$\sum_{k=1}^n \sum_{j_s=1}^{()} \sum_{j_i=s}^{()} \frac{(2 \cdot n_i - n_s - j_s - j_i - s - 2 \cdot \mathbb{k} + 2)!}{(2 \cdot n_i - n_s - j_i - n - 2 \cdot \mathbb{k} + 1)! \cdot (n - s)!} \cdot \frac{(D - l_i)!}{(D + s - n - 1)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa}^s = j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s = 2 \bullet s = s + \mathbb{k} /$$

$$\mathbb{k}_z \bullet z = 1 \Rightarrow$$

$$fz S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i^{l-1} (j_i - s + 1)} \sum_{(j_s=2)} l_{ik+s-k-j_{sa}^{ik}+1} \sum_{j_i=l_i+n-D} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_i=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\begin{aligned}
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{i l - 1} \sum_{(j_s=2)}^{(l_{ik} - k - j_{sa}^{ik} + l_i - k)} \sum_{j_i=l_{ik}+s-k-j_{sa}^{ik}}^{(n_i - j_s + 1) - n_{is} + j_s - j_i - k} \\
 & \sum_{n_i=n+k}^{(n_i - n + k - j_s + 1) - n_{is} - j_i + 1} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(j_s - n_s - 1)!}{(j_i - 2)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=i l}^{()} \sum_{(j_s=1)}^{l_i - i l + 1} \sum_{j_i=l_i+n-D}^{(n_i - j_i - k + 1)} \\
 & \sum_{n_i=n+k}^n \sum_{(n_s=n-j_i+1)}^{(n_i - j_i - k + 1)} \\
 & \frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!}
 \end{aligned}$$

GÜLDÜMAYA

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \binom{()}{(j_s=j_i-s+1)} \sum_{j_i=l_i-n-D}^{l_{ik}+l_s-k-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n}^n \sum_{n_{is}=n+l_k-j_s+1}^{()}$$

$$\sum_{n_{ik}=n_{is}+l_s-j_{sa}^{ik}+1}^{()}$$

$$\frac{(2 \cdot n_{is} + j_s - n_s - j_i - 2 \cdot l_k)!}{(2 \cdot n_{is} + 2 \cdot j_s - n_s - j_i - 2 \cdot l_k - j_s)! \cdot (n + j_{sa}^s - j_s - s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n + l_s \leq D - l_s + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 \leq l_s \wedge l_i - j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D - l_s < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n + l_s \wedge l = l_k \geq 0 \wedge$$

$$j_{sa}^s = j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, l_k, j_{sa}^i\} \wedge$$

$$s = 2 \wedge s = s + l_k \wedge$$

$$l_{k_z}: z = 1 \Rightarrow$$

$$\begin{aligned}
fz_{j_s, j_i}^{DOSD} &= \sum_{k=1}^{i^{l-1} (l_i + n - D - s)} \sum_{(j_s=2)}^{l_i - k + 1} \sum_{j_i = l_i + n - D} \\
&\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_s = n - j_i}^{n_{is} + j_s - j_i - k} \\
&\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
&\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
&\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
&\frac{(l_s - j_s - k + 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
&\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
&\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!} + \\
&\sum_{k=1}^{i^{l-1} (l_{ik} - k - j_{sa}^{ik} + 2)} \sum_{(j_s = l_i + n - D - s + 1)}^{l_i - k + 1} \sum_{j_i = j_s + s - 1} \\
&\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_s = n - j_i + 1}^{n_{is} + j_s - j_i - k} \\
&\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
&\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
&\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
&\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
&\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot
\end{aligned}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{l_i} \sum_{(j_s=1)}^{()} \sum_{j_i=l_i+n-D}^{l_i-i+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_i-j_i+1)}^{(n_i-j_i-l_k)}$$

$$\frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - j_i + 1)!} \cdot$$

$$\frac{(n_i - n_s - 1)!}{(n_i + j_i - n_s - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_i - l_s - 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

$$\sum_{k=1}^{l_i+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(k-k-j_{sa}^{ik}+2)} \sum_{j_i=j_s+s-1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_i=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^{ik})}^{()}$$

$$\frac{(2 \cdot n_{is} + j_s - n_s - j_i - s - 2 \cdot l_k)!}{(n_{is} + 2 \cdot j_s - n_s - j_i - n - 2 \cdot l_k - j_{sa}^s)! \cdot (n + j_{sa}^s - j_s - s)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa}^s = j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s = 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(j_i-s+1)} \sum_{l_s=s-k}^{l_s+s-k} \sum_{n_i=n+\mathbb{k}}^{n_i+j_s-1} \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{n_{is}+j_s-j_i-\mathbb{k}} \sum_{n_s=n-j_i+1}^{n_s=n-j_i+1} \frac{(n_i - n_{is} - 1)!}{(i - l - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(l_s-k+1)} \sum_{j_i=l_s+s-k+1}^{l_{ik}+s-k-j_{sa}^{ik}+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}}$$

GÜLDÜMÜNYA

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - 1)!}{(j_s + l_i - j_i - 1)! \cdot (j_i - j_s + 1)!}$$

$$\frac{(n - l_i)!}{(n - j_i - 1)! \cdot (n - j_i)!}$$

$$\sum_{i=1}^n \sum_{j_s=1}^{n-l_i} \sum_{j_i=l_{ik}+n+s-D-j_s a}^{n-l_{ik}+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_s=n-j_i+1)}^{(n_i-j_i-l_k+1)}$$

$$\frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_i-s+1)}^{()} \sum_{j_i=l_{ik}+n+s-D-j_s a}^{l_s+s-k}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

GÜLDÜMNA

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-\mathbb{k})}^{(\cdot)}$$

$$\frac{(2 \cdot n_{is} + j_s - n_s - j_i - s - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_s - n_s - j_i - n - 2 \cdot \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - j_s - s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - \dots)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa}^s = j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s = 2 \wedge s = s + 1 \wedge$$

$$\mathbb{k}: z = 1 =$$

$$fz_{j_s, j_i}^{DOSD} = \sum_{k=1}^{l-1} \sum_{(j_s=2)}^{(l_{ik}+n-D-j_{sa}^{ik})} \sum_{j_i=l_{ik}+n+s-D-j_{sa}^{ik}}^{l_{ik}+s-k-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\begin{aligned}
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{i-1} \sum_{(j_s=l_{ik}+n-D-j_s^{ik}+1)}^{(l_s-k+1)} \sum_{j_i=l_{ik}+n-k-j_s^{ik}+1}^{l_{ik}+n-k-j_s^{ik}+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s^{ik}+1)}^{(j_s+1)} \sum_{n_s=n-j_i+1}^{i-l_k} \\
 & \frac{(n_i - n_s - 1)!}{(j_s - 1)! \cdot (n_i - n_s - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=i}^l \sum_{(j_s=1)}^{()} \sum_{j_i=l_{ik}+n+s-D-j_s^{ik}}^{l_{ik}+s-i-l-j_s^{ik}+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_s=n-j_i+1)}^{(n_i-j_i-l_k+1)} \\
 & \frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot
 \end{aligned}$$

GÜLDÜZ

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_s-k+1)} \sum_{j_i=j_s+s-1}^{(j_s+1)}$$

$$\sum_{n_i=n+l_s-j_s-1}^n \sum_{(j_s+1)}^{(j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_i-j_{sa}^{ik}} \sum_{(j_s+1)}^{(j_s+1)}$$

$$\frac{(2 \cdot n_{is} + j_s - j_i - 2 \cdot l_k)!}{(2 \cdot n_{is} + 2 \cdot j_s - n_s - j_i - n - l_k - j_{sa}^s) \cdot (n + j_{sa}^s - j_s - s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s \leq D - n + 1$$

$$1 \leq j_s \leq j_i - s + 1$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s \leq j_i \leq n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$l_i \leq D + s - n) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa}^s = j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s = 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(j_i-s+1)} \sum_{j_i=s+1}^{l_s+s-k}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\begin{aligned}
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{i-l-1} \sum_{j=2}^{l_s-k+1} \sum_{j_i=l_i-k+1}^{j_i-k+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{n_s=n-j_i+1}^{n_s-j_s+1} \sum_{j_i-k}^{j_i-l_k} \\
 & \frac{(n_i - n_s - 1)!}{(j_s - 1)! \cdot (n_i - n_s - 1)! \cdot (n_s + 1)!} \cdot \\
 & \frac{(n_{is} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=i}^{l_i} \sum_{j_s=1}^{l_i-k+1} \sum_{j_i=s}^{l_i-k+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{n_s=n-j_i+1}^{n_i-j_i-k+1} \\
 & \frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot
 \end{aligned}$$

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$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!} \cdot \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$\sum_{k=1}^{i-1} \sum_{(j_s=j_i-s+1)}^{()} \sum_{j_i=s-k}^{l_s+s-k}$$

$$\sum_{n_i=n+1}^n \sum_{(n_i=j_s+1)}^{(n_i=j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_i-j_{sa}^{ik}}^{()} \sum_{(n_{ik}=n_{is}+j_{sa}^{ik}-j_i-j_{sa}^{ik})}$$

$$\frac{(2 \cdot n_{is} + j_s - j_i - n - 2 \cdot k)!}{(2 \cdot n_{is} + 2 \cdot j_s - n_s - j_i - n - 2 \cdot k - j_{sa}^s) \cdot (n + j_{sa}^s - j_s - s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=i}^{()} \sum_{(j_s=1)}^{()} \sum_{j_i=s}$$

$$\sum_{n_i=n+k}^{()} \sum_{(n_{ik}=n_i+j_{sa}^s-j_s-j_{sa}^{ik}+1)}^{()} \sum_{n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-k}$$

$$\frac{(2 \cdot n_i - n_s - j_s - j_i - s - 2 \cdot k + 2)!}{(2 \cdot n_i - n_s - j_i - n - 2 \cdot k + 1)! \cdot (n - s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$(l_i \leq D + s - n) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa}^s = j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^i, j_{sa}^i\} \wedge$$

$$s = 2 \wedge s = i + \mathbb{k} \wedge$$

$$\mathbb{k}_z: i - 1 \Rightarrow$$

$$fz S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(l_s-k+1)} \sum_{j_i=j_s+s-1}^{l_i-k+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - 1)!}{(j_s + l_i - j_i - 1)! \cdot (j_i - j_s + 1)!}$$

$$\frac{(n - l_i)!}{(n - j_i - 1)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{i-1} \sum_{j_s=1}^{i-k} \sum_{j_i=s}^{i+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_s=n-j_i+1)}^{(n_i-j_i-k+1)}$$

$$\frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$\sum_{k=1}^{i-1} \sum_{j_s=2}^{l_s-k+1} \sum_{j_i=j_s+s-1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{\binom{()}{n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-k}} \frac{(2 \cdot n_{is} + j_s - n_s - j_i - s - 2 \cdot k)!}{(2 \cdot n_{is} + 2 \cdot j_s - n_s - j_i - n - 2 \cdot k - j_{sa}^s)! \cdot (n + j_{sa}^s - j_s - s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - s)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (j_i - j_i)!} \sum_{\binom{()}{j_s=1}} \sum_{\binom{()}{j_i=s}}$$

$$\sum_{\binom{()}{n_i=n+k}} \sum_{\binom{()}{n_{ik}=n_i+j_{sa}^s-j_{sa}^{ik}+1}} \sum_{\binom{()}{n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-k}} \frac{(2 \cdot n_i - n_s - j_s - j_i - s - 2 \cdot k + 2)!}{(2 \cdot n_i - n_s - j_i - n - 2 \cdot k + 1)! \cdot (n - s)!} \cdot \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$\begin{aligned} & ((D \geq n < n \wedge l_s \leq D - n + 1) \vee (D \geq n < n \wedge l_s = n - n + 1) \wedge \\ & 1 \leq j_s \leq j_i - s + 1 \wedge j_s + s - 1 \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge \\ & (D + s - n < l_i \leq D + j_s + s - n - 1) \vee \\ & (D \geq n < n \wedge l_s = n - n + 1 \wedge \\ & 1 \leq j_s \leq j_i - s + 1 \wedge \\ & j_s + s - 1 \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge \\ & (D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1) \vee \\ & (D \geq n < n \wedge l_s \leq D - n + 1 \wedge \\ & 1 \leq j_s \leq j_i - s + 1 \wedge \end{aligned}$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa}^s = j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, k, j_{sa}^i\} \wedge$$

$$s = 2 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$fz S_{j_s, j_i}^{D, D, D} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(j_i-s+1)} \sum_{j_i=l_i+n-D}^{l_s+s-k}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(l_s-k+1)} \sum_{j_i=l_s+s-k+1}^{l_i-k+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{is}=n-j_i+1}^{n_{is}+j_s-1}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_i + 1)!} \cdot$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot$$

$$\frac{(n_s - j_i - n - 1)!}{(n_s - j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_i - k - 1)!}{(l_i - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s - l_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=i}^{()} \sum_{(j_s=1)}^{l_i - i + 1} \sum_{j_i=l_i+n-D}$$

$$\sum_{n_i=n+k}^n \sum_{(n_s=n-j_i+1)}^{(n_i-j_i-k+1)}$$

$$\frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

GÜLDEN

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_i-s+1)}^{()} \sum_{j_i=l_i+n-D}^{l_s+s-k} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{()} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_{sa}^s-k)}^{()} \frac{(2 \cdot n_{is} + j_s - n_s - j_i - s - 2)!}{(2 \cdot n_{is} + 2 \cdot j_s - n_s - j_i - n - 2 \cdot k - j_{sa}^s) \cdot (n + j_{sa}^s - s)!} \cdot \frac{(l_s - k - 1)!}{(j_i - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - j_s + n - l_i)!}{(D + j_s - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$((D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D + s - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa}^s = j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s = 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$fz S_{j_s, j_i}^{D, \mathbb{k}} = \sum_{i=1}^{i=l_i+n-D-s} \sum_{(j_s-2)}^{l_i-k+1} \sum_{j_i=l_i+n-D}^{n} \sum_{n_i=n+\mathbb{k}}^{n_i-j_s+1} \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{n_{is}+j_s-j_i-\mathbb{k}} \sum_{n_s=n-j_i+1}^{(n_i - n_{is} - 1)!} \cdot \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{i-1} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)} \sum_{j_i=j_s+s-1}^{l_i-k+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{i_s}+j_s-j_i-l_k}$$

$$\frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!}$$

$$\frac{(n_{i_s} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{i_s} + j_s - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s - 1)!}{(j_s + l_i - l_s - s - 1)! \cdot (j_i - l_i - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{()} \sum_{(j_s=1)}^{()} \sum_{j_i=l_i+n-D}^{l_i-l+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_s=n-j_i+1)}^{(n_i-j_i-l_k+1)}$$

$$\frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)} \sum_{j_i=j_s+s-1}$$

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$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s)}^{(\quad)}$$

$$\frac{(2 \cdot n_{is} + j_s - n_s - j_i - s - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_s - n_s - j_i - n - 2 \cdot \mathbb{k} - j_{sa}^s)! \cdot (n + j_s - j_s - s)!}$$

$$\frac{(l_s - k - 1)! \cdot (j_s - 2)!}{(l_s - j_s - 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - 1 - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_i - s + 1 \wedge$

$j_s + s - 1 \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_{sa} + j_{sa} - s > 0 \wedge$

$D + s - n < l_i \leq D + l_s + j_s - n - 1 \wedge$

$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$

$j_{sa}^s = j_{sa}^i - 1 \wedge$

$s: \{j_{sa}^s, \mathbb{k}, j_{sa}^{ik}\}$

$s = 2 \wedge s = s + 1$

$\mathbb{k}_z: z = 1 \Rightarrow$

$$f_z^{DOSD}_{j_s, j_i} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(j_i-s+1)} \sum_{j_i=l_i+n-D}^{l_{sa}+s-k-j_{sa}+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} + \frac{(l_i)!}{(D + j_i - n - l_i)! \cdot (j_i)!} + \sum_{k=1}^{i-1} \sum_{s=2}^{(l_{sa}-k-j_{sa}+2)} \sum_{n_i=n+l_k}^n \sum_{n_s=n+l_k-j_s+1}^{n_{is}+j_s-j_i-l_k} \frac{(n_i - n_{is} - 1)!}{(i - l)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} + \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{i-1} \sum_{s=1}^{(l_i - i) + 1} \sum_{j_i=l_i+n-D}^{l_i - i + 1} \sum_{n_i=n+l_k}^n \sum_{n_s=n-j_i+1}^{(n_i - j_i - l_k + 1)}$$

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$$\frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \binom{D+l_s+s-n-l_i}{(j_s=j_i+k+1)} \sum_{j_i=l_i+n-k}^{l_{sa}+s-j_{sa}+1} \binom{l_{sa}+s-j_{sa}+1}{j_i=l_i+n-k}$$

$$\sum_{n_i=n+k}^n \binom{n}{n_i=n+k} \sum_{n_s=n-k}^{(n_i-j_s+1)} \binom{(n_i-j_s+1)}{n_s=n-k}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{lk}} \binom{D+l_s+s-n-l_i}{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{lk}} \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{lk}} \binom{(n_i-j_s+1)}{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{lk}}$$

$$\frac{(2 \cdot n_{is} + j_s - j_i - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + j_s - n_s - j_i - 2 \cdot \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - j_s - s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1$$

$$1 \leq j_s \leq j_s - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i$$

$$l_{ik} - j_{sa}^{lk} = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n - l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa}^s = j_{sa}^l - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}^l\} \wedge$$

$$s = 2 \wedge s = s + \mathbb{k} \wedge$$

$$lk_z: z = 1 \Rightarrow$$

$$fz S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(l_i+n-D-s)} \sum_{j_i=l_i+n-D}^{l_i-k+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-l_k}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{i-1} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{sa}-k-j_{sa}+2)} \sum_{j_i=j_s+s-1}^{l_i-k+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-l_k}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

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$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{l_i} \sum_{(j_s=1)}^{l_i - i + 1} \sum_{j_i=l_i+n-l_s}^{l_i - i + 1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_i=n+l_k-j_i+1)}^{(j_i-l_k+1)}$$

$$\frac{(n - n_s - 1)!}{(i - 2)! \cdot (n - n_s - j_i + 1)!} \cdot$$

$$\frac{(n_s - i - n - 1)!}{(n - j_i)!} \cdot$$

$$\frac{(l_i - l_s - s + 1)!}{(j_i - j_s - l_s + 1)! \cdot (j_i - s)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot$$

$$\sum_{k=1}^{+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{sa}-k-j_{sa}+2)} \sum_{j_i=j_s+s-1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}}^{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^{ik}-l_k)}$$

$$\frac{(2 \cdot n_{is} + j_s - n_s - j_i - s - 2 \cdot l_k)!}{(2 \cdot n_{is} + 2 \cdot j_s - n_s - j_i - n - 2 \cdot l_k - j_{sa}^s)! \cdot (n + j_{sa}^s - j_s - s)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa}^s = j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, k, j_{sa}^i\} \wedge$$

$$s = 2 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$f_z^{SD} = \sum_{k=1}^l \sum_{j_s=1}^{j_i-s+1} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{ik}-j_{sa}^{ik}+1} \sum_{n_i=n+k}^n \sum_{n_s=n+k-j_s+1}^{(n_i-j_s)} \sum_{n_s=n-j_i+1}^{n_i+j_s-j_i-k} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{i-l-1} \sum_{j_s=2}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j_i=l_{ik}+s-k-j_{sa}^{ik}+2}^{l_{sa}+s-k-j_{sa}+1}$$

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$$\begin{aligned}
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - l_s - i - s + 1)! \cdot (i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{i=1}^{(j_s-1)} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{sa}+s-i-l-j_{sa}+1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_s=n-j_i+1)}^{(n_i-j_i-k+1)} \\
 & \frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} - \\
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_i-s+1)}^{(j_s-1)} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{ik}+s-k-j_{sa}^{ik}+1}
 \end{aligned}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s)}^{(\quad)}$$

$$\frac{(2 \cdot n_{is} + j_s - n_s - j_i - s - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_s - n_s - j_i - n - 2 \cdot \mathbb{k} - j_{sa}^s)! \cdot (n + j_s - j_s - s)!}$$

$$\frac{(l_s - k - 1)! \cdot (l_s - 2)!}{(l_s - j_s - 1)! \cdot (l_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_{sa} + j_{sa} - s = \dots \wedge$$

$$D + s - n < l_i \leq D + l_s + \dots - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa}^s = j_{sa}^i - 1 \wedge$$

$$s: (j_{sa}^s, \mathbb{k}, j_{sa}^{ik})$$

$$s = 2 \wedge s = s + 1$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(l_{sa}+n-D-j_{sa})} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{sa}+s-k-j_{sa}+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\begin{aligned}
 & \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(l_i)!}{(D + j_i - n - l_i)! \cdot (j_i)!} + \\
 & \sum_{k=1}^{i-1} \sum_{j_s=l_{sa}-D-j_{sa}}^{l_{ik}-k-j_{sa}^{ik}+2} \sum_{n_s=n-j_i+1}^{l_{sa}+s-k-j_{sa}+1} \\
 & \frac{(n_i - n_{is} - 1)!}{(i - l)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{i-1} \sum_{j_s=1}^{l_{sa}+s-i-l-j_{sa}+1} \sum_{n_i=n+l_k}^{n_i-j_i-l_k+1} \sum_{n_s=n-j_i+1}^{n_s=n+l_k-j_s+1}
 \end{aligned}$$

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$$\frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \binom{l_{ik}-k-1}{j_s=l_{sa}+n-l_i-k} \binom{l_i-k-1}{j_i=j_s+1}$$

$$\sum_{n_i=n+l_k}^n \binom{n_i-j_s+1}{n_i-j_s+1}$$

$$\sum_{n_{is}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \binom{()}{n_{is}=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-k}$$

$$\frac{(2 \cdot n_{is} + j_s - l_i - j_i - 2 \cdot k)!}{(2 \cdot n_{is} + 2 \cdot j_s - n_s - j_i - n - 2 \cdot k - j_{sa}^s)! \cdot (n + j_{sa}^s - j_s - s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + j_s = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$l_{sa} < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa}^s = j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s = 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned} c_z^D S_{j_s, j_i}^D &= \sum_{(j_s=2)}^{i^{l-1} (s+1)} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_s+s-k} \\ &\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}} \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \\ &\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \\ &\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\ &\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \\ &\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \\ &\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \end{aligned}$$

$$\begin{aligned}
& \sum_{k=1}^{i^{l-1} (l_s - k + 1)} \sum_{(j_s=2)}^{l_{sa} + s - k - j_{sa} + 1} \sum_{j_i = l_s + s - k + 1} \\
& \sum_{n_i = n + lk}^n \sum_{(n_{is} = n + lk - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_s = n - j_i}^{n_{is} + j_s - j_i - lk} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - l_i - k + 1)!}{(l_s - l_i - s - 2)!} \cdot \\
& \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_s - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=i^l}^{()} \sum_{(j_s=1)}^{l_{sa} + s - i^l - j_{sa} + 1} \sum_{j_i = l_{sa} + n + s - D - j_{sa}} \\
& \sum_{n_i = n + lk}^n \sum_{(n_s = n - j_i + 1)}^{(n_i - j_i - lk + 1)} \\
& \frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -
\end{aligned}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_i-s+1)}^{(\quad)} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_s+s-k} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}}^{(\quad)} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_{sa}^{ik})}^{(\quad)} \frac{(2 \cdot n_{is} + j_s - n_s - j_i - s - 2)}{(2 \cdot n_{is} + 2 \cdot j_s - n_s - j_i - n - 2 \cdot k - j_{sa}^{ik}) \cdot (n + j_{sa}^{ik} - s)!} \cdot \frac{(l_s - k - 1)!}{(j_i - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - j_s + n - l_i)! \cdot (n - j_i)!}{(D + j_s - n - l_i)! \cdot (n - j_i)!}$$

$((D \geq n < n \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_i - s + 1 \wedge$

$j_s + s - 1 \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$

$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_i - s + 1 \wedge$

$j_s + s - 1 \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$

$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_i - s + 1 \wedge$

$j_s + s - 1 \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$D + s - n < l_i \leq D + l_s + s - n - 1) \wedge$

$$D \geq n < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa}^s = j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s = 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$fz S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(l_{sa}+n-D-j_{sa})} \frac{l_{sa}+s-k-j_{sa}+1}{(j_s-2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_i - j_s + 1)}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_{is} - 1)!}{(n_s - 1)!} \cdot \frac{(n_s - 1)!}{(j_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{i-1} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_s-k-1)} \sum_{j_i=j_s+s-1}^{l_{sa}+s-k-j_{sa}+1} \frac{(n_i - j_s + 1)}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} + j_s - j_i - \mathbb{k})}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_{is} - 1)!}{(n_s - 1)!} \cdot \frac{(n_s - 1)!}{(j_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

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$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s - 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{j_s=l_{sa}+n-D-j_{sa}+1}^{(l_s-k-1)} \sum_{j_i=j_s+s-1}^{(n_i-j_i-k+1)}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}$$

$$\frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_s-k-1)} \sum_{j_i=j_s+s-1}^{(n_i-j_i-k+1)}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-k)}$$

$$\frac{(2 \cdot n_{is} + j_s - n_s - j_i - s - 2 \cdot k)!}{(2 \cdot n_{is} + 2 \cdot j_s - n_s - j_i - n - 2 \cdot k - j_{sa}^s)! \cdot (n + j_{sa}^s - j_s - s)!}$$

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$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k, j_{sa}^i\}$$

$$s > 2 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$f_{z,j_s,j_i} = \sum_{k=1}^{n+1} \sum_{(j_s - l_{ik} + n - D - j_{sa}^{ik} + 1)}^{(j_i - 1)} \sum_{j_i = l_i + n - D}^{l_{ik} + s - k - j_{sa}^{ik} + 1}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_s = n - j_i + 1}^{n_{is} + j_s - j_i - k}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - k - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - k)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\begin{aligned}
 & \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j_i=l_{ik}+s-k-j_{sa}^{ik}+2}^{l_i-k+1} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i-\mathbb{k}}^{n_{is}+j_s-j_i-\mathbb{k}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n - \mathbb{k})!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - j_s - k + 1)!}{(j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s + s + 1)!}{(j_s + l_i - j_s - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \\
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_i-s+1)}^{()} \sum_{j_i=l_i+n-D}^{l_{ik}+s-k-j_{sa}^{ik}+1} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{()} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-\mathbb{k})}^{()} \\
 & \frac{(2 \cdot n_{is} + j_s - n_s - j_i - s - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_s - n_s - j_i - n - 2 \cdot \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - j_s - s)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k, j_{sa}^i\} \wedge$$

$$s > 2 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$fz_{j_s, j_i}^{DOSD} = \sum_{k=1}^{D-n+1} \sum_{\substack{(l_i+n-s) \\ (l_{ik}+n-j_s+1)}} \sum_{\substack{l_i-k+1 \\ l_i+n-D}} \sum_{\substack{n \\ n_i=n+k}} \sum_{\substack{(n_i-j_s+1) \\ (n_{is}+j_s-j_i-k)}} \sum_{\substack{n_{is}+j_s-j_i-k \\ n_s=n-j_i+1}} \frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - k - 1)!}{(j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - k)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{D-n+1} \sum_{\substack{(l_{ik}-k-j_{sa}^{ik}+2) \\ (j_s=l_i+n-D-s+1)}} \sum_{\substack{l_i-k+1 \\ j_i=j_s+s-1}} \sum_{\substack{n \\ n_i=n+k}} \sum_{\substack{(n_i-j_s+1) \\ (n_{is}+j_s-j_i-k)}} \sum_{\substack{n_{is}+j_s-j_i-k \\ n_s=n-j_i+1}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i - 1)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - 1)!}{(j_s + l_i - j_i - 1)! \cdot (j_i - j_s - 1)!} \cdot \frac{(n - l_i)!}{(n - j_i - 1)! \cdot (n - j_i)!} \cdot \sum_{k=1}^{+s-n-l_i} \sum_{(j_s=l_i+k)}^{(l_i-k-j_{sa})} \sum_{j_i=j_s+s-1}^{(j_s+s-1)} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{k=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{()} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-\mathbb{k})}^{()} \frac{(2 \cdot n_{is} + j_s - n_s - j_i - s - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_s - n_s - j_i - n - 2 \cdot \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - j_s - s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$l_s - j_i - s + 1 \wedge$

$j_s + s - 1 \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$

$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s > 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$fz^D_{j_s, j_i}^{DOSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(j_i-s+1)} \sum_{j_i=l_{ik}+l_s-D-j_{sa}^{ik}}^{l_s+s-k} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}-j_i-\mathbb{k}}$$

$$\frac{(n_i - j_s - 1)!}{(j_s - 2)! \cdot (n_i - j_s + 1)!} \cdot \frac{(n_{is} - j_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!} \cdot \frac{(n_s - 1)!}{(n_s - j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)} \sum_{j_i=l_s+s-k+1}^{l_{ik}+s-k-j_{sa}^{ik}+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!}$$

$$\begin{aligned}
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{D+l_s+s-n-l_i} \binom{()}{j_s=j_i-s} \sum_{i=l_{ik}+n+s-D}^{l_s+s} \binom{()}{n_i=n+l_k} \sum_{n_i=n+l_k}^{(n_i-j_s+1)} \binom{()}{n_i=n+l_k} \\
 & \frac{(2 \cdot n_{is} + j_s - l_s - j_i - 2 \cdot l_k)!}{(2 \cdot n_{is} + j_s - n_s - j_i - 2 \cdot l_k - j_{sa}^s)! \cdot (n + j_{sa}^s - j_s - s)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

$$\begin{aligned}
 D & \geq l_s \leq n \wedge l_s > D - n + 1 \wedge \\
 l_s & \leq j_s \leq j_i - s + 1 \wedge \\
 j_s + l_s - 1 & \leq j_i - s \\
 l_{ik} - j_{sa}^{ik} + l_s & > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge \\
 l_{ik} & > n - l_i \wedge I = l_k > 0 \wedge \\
 j_{sa}^{ik} & = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge \\
 \mathbf{s}: & \{j_{sa}^s, \dots, l_k, j_{sa}^i\} \vee \mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, l_k, j_{sa}^i\} \wedge \\
 s & > 2 \wedge \mathbf{s} = s + l_k \wedge
 \end{aligned}$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_{ik}+n-D-j_{s_a}^{ik})} \sum_{j_i=l_{ik}+n+s-D-j_{s_a}^{ik}}^{l_{ik}+s-k-j_{s_a}^{ik}+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i + l_s - s + 1)!}{(l_i + l_s - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{n+1} \sum_{(j_s=l_{ik}+n-D-j_{s_a}^{ik}+1)}^{(l_s-k+1)} \sum_{j_i=j_s+s-1}^{l_{ik}+s-k-j_{s_a}^{ik}+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

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$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_s-k+1)} \sum_{j_i=j_s+s-1}^{(j_s+1)}$$

$$\sum_{n_i=n+l_s-j_s-1}^{(n+l_s-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{is}+j_{sa}^{ik}-j_i-j_{sa}^{ik}}^{(n+l_s-j_s+1)}$$

$$\frac{(2 \cdot n_{is} + 2 \cdot j_s - n_s - j_i - n - 2 \cdot l_k)!}{(2 \cdot n_{is} + 2 \cdot j_s - n_s - j_i - n - 2 \cdot l_k - j_{sa}^s)! \cdot (n + j_{sa}^s - j_s - s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1$$

$$2 \leq j_s \leq j_i - s + 1$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$(l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$(l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik}) \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k, j_{sa}^i\} \wedge$$

$$s > 2 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$fz S_{j_s j_i}^{DOSD} = \sum_{k=1}^{D-n+1} \sum_{\substack{(j_s-s+1) \\ (j_s+n-D) \\ j_i=l_i+s-k}} \frac{(n_i-j_s+1) \cdot (n_{is}+j_s-j_i-k)}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_s-k-1)!}{(j_i-l_i-1)! \cdot (n_{is}+j_s-n_s-j_i-k)!} \cdot \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \frac{(l_i-l_s-s+1)!}{(j_s+l_i-j_i-l_s)! \cdot (j_i-j_s-s+1)!} \cdot \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \sum_{k=1}^{D-n+1} \sum_{\substack{(l_s-k+1) \\ (j_s=l_s+n-D) \\ j_i=l_s+s-k+1}} \sum_{\substack{(n_i-j_s+1) \\ (n_{is}=n+k-j_s+1) \\ n_s=n-j_i+1}} \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!}$$

$$\frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(l_i)!}{(D + j_i - n - l_i)! \cdot (j_i)!}$$

$$\sum_{n_i=n+1}^{D+l_s+s-n-l_i} \sum_{n_{is}=n+\mathbb{k}-j_s+1}^{l_s+s-n} \binom{l_s+s-n}{n_{is}} \binom{n}{n_i}$$

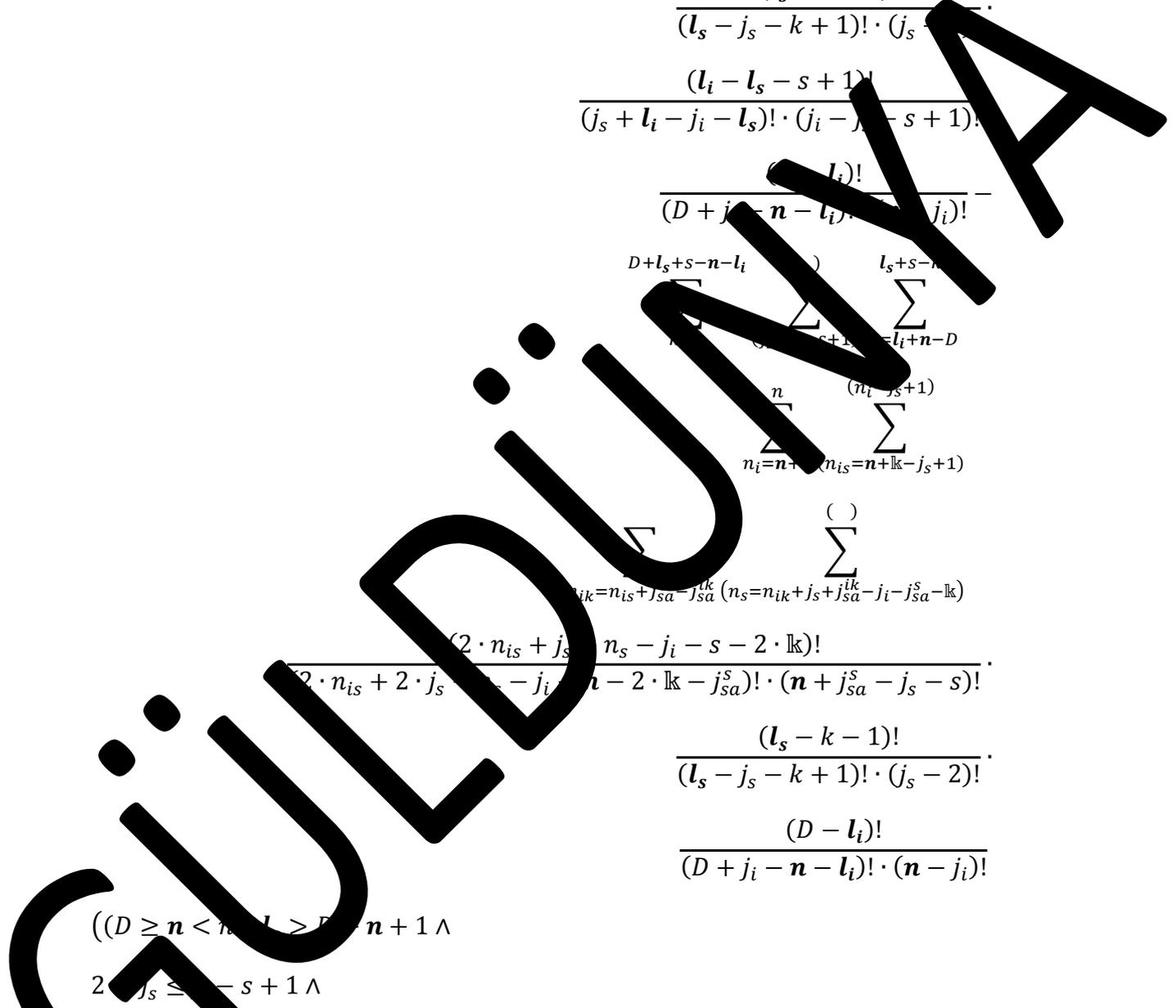
$$\sum_{n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-\mathbb{k}}^{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}} \binom{()}{n_s}$$

$$\frac{(2 \cdot n_{is} + j_s) \cdot (n_s - j_i - s - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_s) \cdot (n - 2 \cdot \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - j_s - s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

- $((D \geq n < n \wedge l_s > D - n + 1 \wedge$
- $2 \leq j_s \leq j_i - s + 1 \wedge$
- $j_s + s - 1 \leq j_i \leq n \wedge$
- $l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik}) \vee$
- $(D \geq n < n \wedge l_s > D - n + 1 \wedge$
- $2 \leq j_s \leq j_i - s + 1 \wedge$
- $j_s + s - 1 \leq j_i \leq n \wedge$



$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik})) \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k, j_{sa}^i\} \wedge$$

$$s > 2 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$fz S_{j_s, j_i}^{DOSD} = \sum_{j_s=l_s+n-D}^{D-n+1} \sum_{j_i=l_i+n-D}^{l_i-k+1} \sum_{n_i=n+k}^n \sum_{n_{is}=n+k-j_s+1}^{n_i-j_s+1} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - k - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - k)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{D-n+1} \sum_{j_s=l_i+n-D-s+1}^{(l_s-k+1)} \sum_{j_i=j_s+s-1}^{l_i-k+1}$$

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$$\begin{aligned}
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - 1)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_s - l_s - s + 1)!}{(j_s + l_i - l_s - s + 1)! \cdot (j_i - l_i - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{i=1}^{D+l_s+s-n-l_i} \sum_{k=1}^{(l_s-k+1)} \sum_{j_i=l_i+n-D-s+1}^{j_i=j_s+s-1} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{()} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-\mathbb{k})} \\
 & \frac{(2 \cdot n_{is} + j_s - n_s - j_i - s - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_s - n_s - j_i - n - 2 \cdot \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - j_s - s)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k, j_{sa}^i\} \wedge$$

$$s > 2 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$f_z^{DOSD} = \sum_{k=1}^{D-n+1} \sum_{j_s=l_{sa}+n-D-j_{sa}+1}^{(j_i-s+1)} \sum_{j_i=l_{sa}+s-k-j_{sa}+2}^{l_{sa}+s-k-j_{sa}+1} \sum_{n_i=n+k}^n \sum_{n_{is}=n+k-j_s+1}^{(n_i-j_s)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - k - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - k)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{D-n+1} \sum_{j_s=l_{sa}+n-D-j_{sa}+1}^{(l_{sa}-k-j_{sa}+2)} \sum_{j_i=l_{sa}+s-k-j_{sa}+2}^{l_i-k+1} \sum_{n_i=n+k}^n \sum_{n_{is}=n+k-j_s+1}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(l_i)!}{(D + j_i - n - l_i)! \cdot (j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_i)}^{(l_s)} \sum_{j_i=n-D}^{l_{sa}+s-k-j_{sa}} \sum_{n_i=n+1}^n \sum_{n_{is}=n+\mathbb{k}-j_s+1}^{(n_i-j_s+1)}$$

$$\sum_{n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^{ik}}^{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^{ik})}$$

$$\frac{(2 \cdot n_{is} + j_s) \cdot (n_s - j_i - s - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_s - j_i - s - 2 \cdot \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - j_s - s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n) \wedge l_i > D - n + 1 \wedge$$

$$D > n < n) \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s > 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z^S{}_{j_s, j_i}^{DOSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_i+n-D-s)} \sum_{j_i=l_i+n-l_s-k+1}^{l_i-k+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}}$$

$$\frac{(j_s-2)! \cdot (n_i-n_{is}-1)!}{(j_i-j_s-1)! \cdot (n_{is}+j_s-n_s-j_i-\mathbb{k})!} \cdot \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \frac{(l_i-l_s-s+1)!}{(j_s+l_i-j_i-l_s)! \cdot (j_i-j_s-s+1)!} \cdot \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} +$$

$$\sum_{k=1}^{D-n+1} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{sa}-k-j_{sa}+2)} \sum_{j_i=j_s+s-1}^{l_i-k+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_s-\mathbb{k}-1)!}{(j_i-j_s-1)! \cdot (n_{is}+j_s-n_s-j_i-\mathbb{k})!} \cdot \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{sa}-k-j_{sa}+2)} \sum_{j_{sa}^i=0}^{j_{sa}^i+s-1} \sum_{n_i=0}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_{is}-1)}$$

$$\sum_{n_{ik}=n_{is}}^{j_{sa}^i-j_{sa}^{ik}} \sum_{(n_{is}+j_s+j_{sa}^{ik}-j_i-j_{sa}^i-\mathbb{k})}^{(n_{is}-1)}$$

$$\frac{(2 \cdot n_{is} + j_s - n_s - j_i - \mathbb{k} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_s - n_s - j_i - \mathbb{k} - 2 \cdot \mathbb{k})! \cdot (n + j_{sa}^i - j_s - s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_i > D - l_s + 1 \wedge$

$2 \leq j_s \leq j_i - s + 1 \wedge$

$j_s + s - 1 \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + j_{sa}^i = l_s \wedge l_s - j_{sa}^{ik} - j_{sa}^i > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$D > n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$

$s \in \{j_{sa}^i, \mathbb{k}, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}^i\} \wedge$

$s > 2 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 1 \Rightarrow$

$$\begin{aligned}
 f_z S_{j_s, j_i}^{DOSD} = & \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(j_i-s+1)} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{ik}+s-k-j_{sa}^{ik}+1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i-k}^{n_{is}+j_s-j_i-k} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - k - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - k)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j_i=l_{ik}+s-k-j_{sa}^{ik}+1}^{l_{sa}+s-k-j_{sa}^{ik}+1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - k - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - k)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot
 \end{aligned}$$

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$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_i-s+1)}^{()} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{ik}+s-k-j_{sa}^{ik}+1} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik})}^{()} \frac{(2 \cdot n_{is} + j_s - n_s - j_i - s - 2 \cdot \dots)}{(2 \cdot n_{is} + 2 \cdot j_s - n_s - j_i - n - 2 \cdot \dots)! \cdot (n + \dots - j_s - s)!} \cdot \frac{(l_s - k)}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

- $D \geq n < n \wedge l_s > D - n + 1 \wedge$
- $2 \leq j_s \leq j_i - s + 1 \wedge$
- $j_s + s - 1 \leq j_i \leq n \wedge$
- $l_{ik} - j_{sa} + \dots = l_s \wedge l_{ik} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$
- $D \geq n < n \wedge l_s > 0 \wedge$
- $j_{sa}^{ik} = j_i - 1 \wedge j_{sa}^s \leq j_i - 1 \wedge$
- $S: \{j_{sa}^s, \dots, j_{sa}^i\} \vee S: \{j_{sa}^1, \dots, j_{sa}^k, j_{sa}^i\} \wedge$
- $s > \dots = s + k \wedge$
- $k_z: z = 1 =$

$$f_z^{DOSD}_{j_s, j_i} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_{sa}+n-D-j_{sa})} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{sa}+s-k-j_{sa}+1} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D-l_i} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_{ik}-k-j_{sa}^i+2)} \sum_{j_i=j_s+s-1}^{j_{sa}+1}$$

$$\sum_{n_i=1}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_{ik}-k-j_{sa}^i+2)} \sum_{j_i=j_s+s-1}^{j_{sa}+1}$$

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$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{i_s}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{i_s}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s)}^{(\)}$$

$$\frac{(2 \cdot n_{i_s} + j_s - n_s - j_i - s - 2 \cdot \mathbb{k})!}{(2 \cdot n_{i_s} + 2 \cdot j_s - n_s - j_i - n - 2 \cdot \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - j_s - s)!}$$

$$\frac{(l_s - k - 1)! \cdot (l_s - 2)!}{(l_s - j_s - 1)! \cdot (l_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - l_i)! \cdot (n - j_i)!}$$

$((D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq j_s \leq j_i - s + 1 \wedge$

$j_s + s - 1 \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$

$(D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq j_s \leq j_i - s + 1 \wedge$

$j_s + s - 1 \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$

$(D > n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq j_s \leq j_i - s + 1 \wedge$

$j_s + s - 1 \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \wedge$

$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}^i\} \wedge$

$s > 2 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 1 \Rightarrow$

$$\begin{aligned}
 f_{z} S_{j_s, j_i}^{DOSD} &= \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(j_i-s+1)} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_s+s-k} \\
 &\quad \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k} \\
 &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 &\quad \frac{(n_{is} - n_s - k - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - k)!} \cdot \\
 &\quad \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 &\quad \frac{(l_s - j_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 &\quad \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 &\quad \frac{(D - l_i)!}{(D - l_i - n - l_i)! \cdot (n - j_i)!} + \\
 &\quad \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)} \sum_{j_i=l_{sa}+s-k-j_{sa}+1}^{l_{sa}+s-k-j_{sa}+1} \\
 &\quad \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k} \\
 &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 &\quad \frac{(n_{is} - n_s - k - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - k)!} \cdot \\
 &\quad \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 &\quad \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 &\quad \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot
 \end{aligned}$$

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$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_i-s+1)}^{(\cdot)} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_s+s-k} \sum_{n_i=n+k}^n \sum_{(n_{is}+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}}^{(\cdot)} \sum_{(n_{ik}+j_s+j_{sa}^{ik}-j_{sa}^{ik}-k)}^{(\cdot)} \frac{(2 \cdot n_{is} + j_s - n_s - j_i - s - 2 \cdot k)!}{(2 \cdot n_{is} + 2 \cdot j_s - n_s - j_i - n - 2 \cdot k)! \cdot (n - n_{is} - j_s - s)!} \cdot \frac{(l_s - n_{ik} - k)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(n - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$((D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq j_s \leq j_i - s + 1 \wedge$

$j_s + s - 1 \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$

$(D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq j_s \leq j_i - s + 1 \wedge$

$j_s + s - 1 \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$

$(D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq j_s \leq j_i - s + 1 \wedge$

$j_s + s - 1 \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \wedge$

$D \geq n < n \wedge I = k > 0 \wedge$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s > 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_s+n-D-j_{sa})} \sum_{j_i=l_{sa}+s-k-j_{sa}+1}^{l_{sa}+s-k-j_{sa}+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j+1)} \sum_{n_s=n-j_i+1}^{n_{is}-j_i-\mathbb{k}}$$

$$\frac{(n_i - j - 1)!}{(n_i - j_s + 1)!} \cdot \frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!} \cdot \frac{(n_s - 1)!}{(n_s - j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{D-n+1} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_s-k-1)} \sum_{j_i=j_s+s-1}^{l_{sa}+s-k-j_{sa}+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!}$$

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$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{j_s=l_{sa}+n-l_i-j_{sa}+1}^{(l_s-l_i)-j_s+1} \sum_{j_i=j_s+1}^n \sum_{n_i=n+l_k}^{(n_i-j_s+1)} \sum_{n_i+l_k}^{(n_i-j_s+1)} \sum_{n_i+l_k}^{(n_i-j_s+1)} \sum_{n_i+l_k}^{(n_i-j_s+1)}$$

$$\frac{(2 \cdot n_{is} + j_s - j_i - 2 \cdot l_k)!}{(2 \cdot n_{is} + j_s - j_i - 2 \cdot l_k - j_{sa}^s)! \cdot (n - 2 \cdot l_k - j_{sa}^s)! \cdot (n + j_{sa}^s - j_s - s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D < n + 1 \wedge$$

$$1 \leq j_s \leq j_s - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$1 \leq D + j_i - n \wedge$$

$$D \geq n < n \wedge l = l_k > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, l_k, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, l_k, j_{sa}^i\} \wedge$$

$$s > 2 \wedge s = s + l_k \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(j_i-s+1)} \sum_{j_i=s+1}^{l_{ik+s-k-j_{sa}^{ik}+1}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(n_i - l_s - s + 1)!}{(n_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(l_{ik-k-j_{sa}^{ik}+2})} \sum_{j_i=l_{ik+s-k-j_{sa}^{ik}+2}}^{l_i-k+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

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$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=i}^{l_i} \sum_{(j_s=1)}^{()} \sum_{j_i=s}^{l_i - i + 1}$$

$$\sum_{n_i=n}^n \sum_{(j_i=k+1)}^{(j_i-k+1)}$$

$$\frac{(n_i - i - k - 1)!}{(j_i - 2)! \cdot (n_i - i - j_i - k + 1)!} \cdot$$

$$\frac{(n_s - i - n - 1)! \cdot (n - j_i)!}{(l_i - i - s + 1)! \cdot (j_i - s)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - s)!} -$$

$$\sum_{k=1}^{i-1} \sum_{(j_s=j_i-s+1)}^{()} \sum_{j_i=s+1}^{l_{ik}+s-k-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_i=n+k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik} \ (n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-k)}^{()}$$

$$\frac{(2 \cdot n_{is} + j_s - n_s - j_i - s - 2 \cdot k)!}{(2 \cdot n_{is} + 2 \cdot j_s - n_s - j_i - n - 2 \cdot k - j_{sa}^s)! \cdot (n + j_{sa}^s - j_s - s)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

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$$\sum_{k=1}^n \sum_{j_s=1}^{()} \sum_{j_i=s}^{()} \frac{(2 \cdot n_i - n_s - j_s - j_i - s - 2 \cdot \mathbb{k} + 2)!}{(2 \cdot n_i - n_s - j_i - n - 2 \cdot \mathbb{k} + 1)! \cdot (n - s)!} \cdot \frac{(D - l_i)}{(D + s - n - 1)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l_i \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}^i\} \vee s: \{j_{sa}^s, j_{sa}^{ik}, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s > 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z^{DOSD}_{j_s, j_i} = \sum_{k=1}^{i-1} \sum_{j_s=2}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j_i=j_s+s-1}^{l_i-k+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{n_{is}=n+\mathbb{k}-j_s+1}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i - l_i)!} + \sum_{k=1}^{l_i - l_s + 1} \sum_{j_s=1}^{(n - l_i + k - 1)} \sum_{i_i=s}^{(n - l_i + k - 1)}$$

$$\frac{(n_i - l_s - k)!}{(n_i - n_s - j_i - k + 1)!} \cdot \frac{(n_i - j_i - n - 1)!}{(n_i - j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - s + 1)!}{(l_s + 1)! \cdot (j_i - j_s - s)!} \cdot \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!} - \sum_{k=1}^{i-1} \sum_{j_s=2}^{(l_{ik} - k - j_{sa}^{ik} + 2)} \sum_{j_i=j_s+s-1}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}}^{(n_i - j_s + 1)} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^{ik})}^{(n_i - j_s + 1)}$$

$$\frac{(2 \cdot n_{is} + j_s - n_s - j_i - s - 2 \cdot k)!}{(2 \cdot n_{is} + 2 \cdot j_s - n_s - j_i - n - 2 \cdot k - j_{sa}^s)! \cdot (n + j_{sa}^s - j_s - s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

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$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \sum_{k=1}^{i-1} \sum_{(j_s=1)}^{()} \sum_{j_i=s} \sum_{n_i=n+k}^n \sum_{(n_{ik}=n_i+j_{sa}^s-j_s-j_{sa}^{ik}+1)}^{()} \sum_{n_s=n_{ik}+j_s+j_{sa}^s-j_i-j_{sa}^s-k} \frac{(2 \cdot n_i - n_s - j_s - j_i - s - 2 \cdot k + 2)!}{(2 \cdot n_i - n_s - j_i - n - 2 \cdot k + 2)! \cdot (n - s)!} \frac{(D - l_i)!}{(D + s - j_i - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_i \wedge$$

$$D + s - n < l_i \leq D + l_s - n - 1 \wedge$$

$$D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa}^{ik} - 1 \wedge$$

$$s \in \{j_{sa}^s, \dots, k, j_{sa}^s\} \vee s \in \{j_{sa}^s, \dots, j_{sa}^{ik}, k, j_{sa}^i\} \wedge$$

$$s > 2 \wedge s = s + k$$

$$k_z: z = \dots \Rightarrow$$

$$f_z^{DOSD}_{j_s, j_i} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(j_i-s+1)} \sum_{j_i=l_i+n-D}^{l_{ik}+s-k-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - k - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - k)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 1)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(l_i)!}{(D + j_i - n - l_i)! \cdot (j_i)!} +$$

$$\sum_{k=1}^{i-1} \sum_{s=2}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{n_i=n+l_k}^{n+l_k-j_s+1} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k} \dots$$

$$\frac{(n_i - n_{is} - 1)!}{(i - l)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - k - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - k)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{i-1} \sum_{(j_s=1)}^{l_i - i^{l+1}} \sum_{j_i=l_i+n-D}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_s=n-j_i+1)}^{(n_i-j_i-k+1)}$$

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$$\frac{(n_i - n_s - \mathbb{k} - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i - \mathbb{k} + 1)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \binom{l_i+l_s-s-j_i+1}{(j_s=j_i-k+1)} \binom{l_i+l_s-s-j_i+1}{j_i=l_i+n-k}$$

$$\sum_{n_i=n+\mathbb{k}}^n \binom{n_i-j_s+1}{n_i-j_s+1}$$

$$\sum_{n_i=n+\mathbb{k}} \binom{n_i-j_s+1}{n_i-j_s+1}$$

$$\frac{(2 \cdot n_{i_s} - j_s - n - 2 \cdot \mathbb{k})!}{(2 \cdot n_{i_s} - 2 \cdot j_s - n_s - j_i - n - 2 \cdot \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - j_s - s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + 1 \leq j_i - s$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$l_i + s - 1 < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

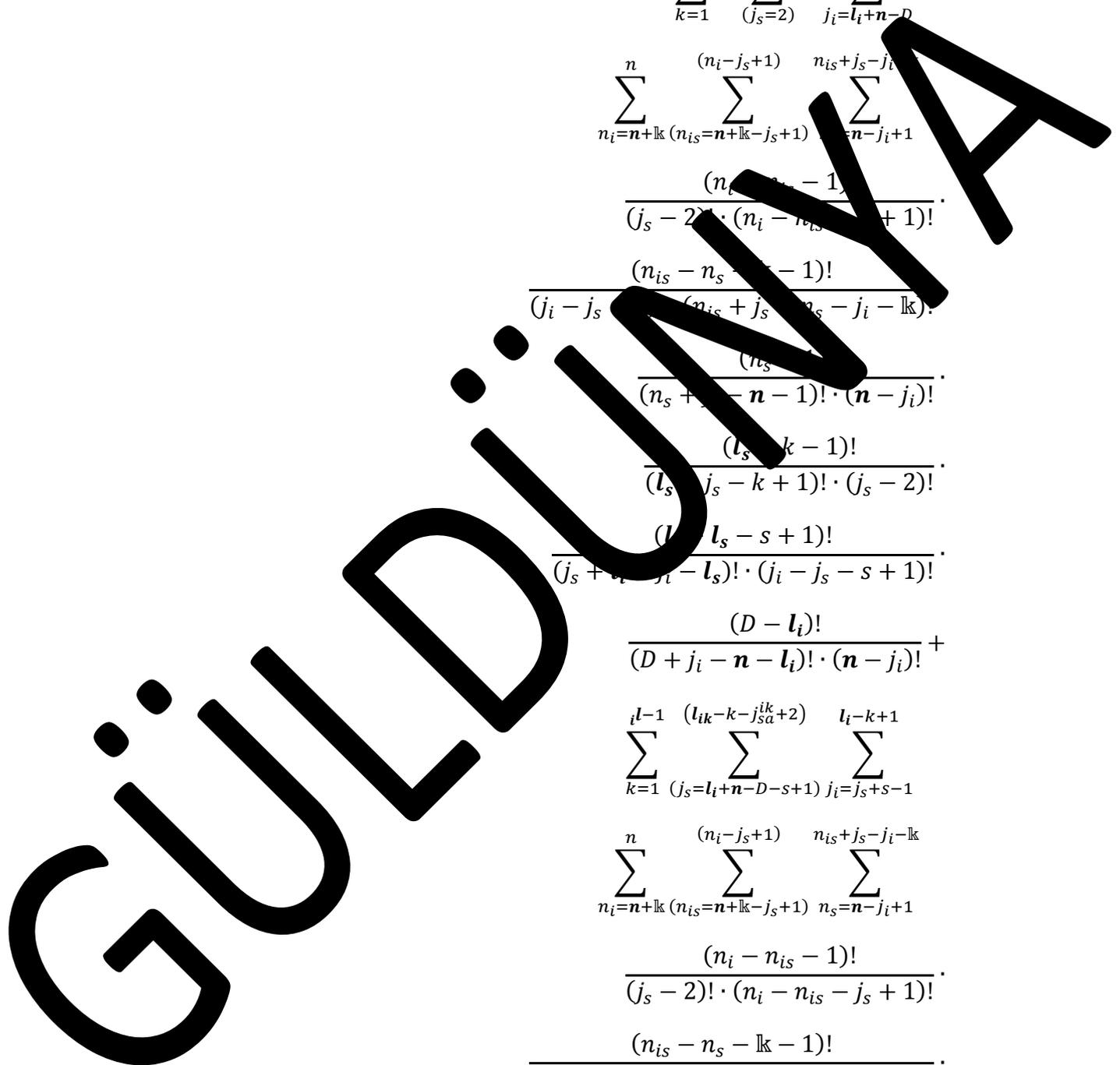
$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}^i\} \wedge$$

$s > 2 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 1 \Rightarrow$

$$fz S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(l_i+n-D-s)} \sum_{j_i=l_i+n-D}^{l_i-k+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s) \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s + j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_s - l_s - s + 1)!}{(j_s + l_s - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{i-1} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{ik}-k-j_{s\bar{a}}^{ik}+2)} \sum_{j_i=j_s+s-1}^{l_i-k+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$



$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{()} \sum_{(j_s=1)}^{l_i - i + 1} \sum_{j_i = n - D}^{n - D}$$

$$\sum_{n_i = n + k}^n \sum_{(n_s = n - j_i + 1)}^{(n_i - j_s + 1)}$$

$$\frac{(n_i - n_s - j_i - k)!}{(j_i - 2)! \cdot (n_i - n_s - j_i - k + 1)!}$$

$$\frac{(n_s + j_i - n - 1)! \cdot (n - j_i)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_i - l_s + 1)! \cdot (j_i - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j_i=j_s+s-1}^{n - j_s + 1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_s=n+k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^{ik})}^{()}$$

$$\frac{(2 \cdot n_{is} + j_s - n_s - j_i - s - 2 \cdot k)!}{(2 \cdot n_{is} + 2 \cdot j_s - n_s - j_i - n - 2 \cdot k - j_{sa}^s)! \cdot (n + j_{sa}^s - j_s - s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

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$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s > 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_{z \rightarrow j}^{QSD} = \sum_{k=1}^{l-s+1} \sum_{j_s=2}^{l-s-k} \sum_{j_i=l_{ik}+n+s-D-j_{sa}^{ik}}^{l_s+s-k}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\begin{aligned}
 & \sum_{k=1}^{i^{l-1} (l_s-k+1)} \sum_{(j_s=2)}^{l_{ik+s-k-j_s^{ik}+1}} \sum_{j_i=l_s+s-k+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i}^{n_{is}+j_s-j_i-l_k} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - l_k - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - l_k)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l_i - k + 1)!}{(l_s - l_i - s + 1)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=i^l}^{(i^l)} \sum_{(j_s=1)}^{l_{ik+s-i^l-j_s^{ik}+1}} \sum_{j_i=l_{ik}+n+s-D-j_s^{ik}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_s=n-j_i+1)}^{(n_i-j_i-l_k+1)} \\
 & \frac{(n_i - n_s - l_k - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i - l_k + 1)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -
 \end{aligned}$$

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$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_i-s+1)}^{(\cdot)} \sum_{j_i=l_{ik}+n+s-D-j_{sa}^{ik}}^{l_s+s-k} \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}}^{(\cdot)} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_{sa}^{ik})}^{(\cdot)} \frac{(2 \cdot n_{is} + j_s - n_s - j_i - s - 2 \cdot l_k - j_{sa}^{ik})!}{(2 \cdot n_{is} + 2 \cdot j_s - n_s - j_i - n - 2 \cdot l_k - j_{sa}^{ik})! \cdot (n + j_{sa}^{ik} - s)!} \cdot \frac{(l_s + k - 1)!}{(j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - j_s + 1)!}{(D + j_s - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_i - s + 1 \wedge$

$j_s + s - 1 \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - j_{sa}^{ik} = l_{ik} \wedge$

$D + s - n < l_i \leq l_i + l_s + s - n - 1 \wedge$

$D > n < n \wedge l_k > 0$

$j_{sa}^{ik} - j_{sa}^i - 1 \wedge j_{sa}^s - j_{sa}^{ik} - 1$

$s: \{j_{sa}^s, l_k, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, l_k, j_{sa}^i\} \wedge$

$s > 2 \wedge s = j_{sa}^s + l_k \wedge$

$l_k = j_{sa}^s - j_{sa}^i$

$$fz_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(l_{ik}+n-D-j_{sa}^{ik})} \sum_{j_i=l_{ik}+n+s-D-j_{sa}^{ik}}^{l_{ik}+s-k-j_{sa}^{ik}+1} \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-l_k}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - k - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - k)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{j_s-1} \sum_{j_s=n-D-j_{sa}^{ik}+1}^{n-D-j_{sa}^{ik}} \sum_{j_i=j_s+s-1}^{j_s+s-1+j_{sa}^{ik}+1}$$

$$\sum_{n_{is}=n+k-j_s+1}^n \sum_{n_i=j_s+1}^{n_i-j_s+1} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - k - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - k)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^l \sum_{j_s=1}^{()} \sum_{j_i=l_{ik}+n+s-D-j_{sa}^{ik}}^{l_{ik}+s-1-l-j_{sa}^{ik}+1}$$

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$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_s=n-j_i+1)}^{(n_i-j_i-\mathbb{k}+1)}$$

$$\frac{(n_i - n_s - \mathbb{k} - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i - \mathbb{k} + 1)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_i - l_s - s - 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{j_s=1}^{D+l_s+s-n} \sum_{(j_s=n-D-j_{sa}^{\mathbb{k}}+s)}^{(l_s-k+1)} \sum_{n_i=n+\mathbb{k}}^{(n_i-j_s+1)} \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}$$

$$\sum_{(n_{is}+j_s^s-n_{ik}+j_s+j_{sa}^{\mathbb{k}}-j_i-j_{sa}^{\mathbb{k}})}^{(n_{is}+j_s^s-n_{ik}+j_s+j_{sa}^{\mathbb{k}}-j_i-j_{sa}^{\mathbb{k}})}$$

$$\frac{(n_{is} + j_s^s - n_{ik} + j_s + j_{sa}^{\mathbb{k}} - j_i - j_{sa}^{\mathbb{k}})!}{(2 \cdot n_{is} + 2 \cdot j_s - n_{ik} + j_s + j_{sa}^{\mathbb{k}} - n - 2 \cdot \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - j_s - s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$((D - l_i) < n \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_i - s + 1 \wedge$

$j_s \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{\mathbb{k}} + 1 = l_s \wedge l_i + j_{sa}^{\mathbb{k}} - s > l_{ik} \wedge$

$l_i \leq D + s - n) \vee$

$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s \leq j_i \leq n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$l_i \leq D + s - n) \wedge$$

$$D \geq n < n \wedge l_i - s + 1 > 0 \wedge$$

$$j_{sa}^{ik} = j_i - 1 \wedge j_{sa}^s \leq j_i - 1 \wedge$$

$$S: \{j_{sa}^s, \dots, j_{sa}^i\} \vee S: \{j_{sa}^s, \dots, j_{sa}^{ik}, k, j_{sa}^i\} \wedge$$

$$s > i - k = s + k \wedge$$

$$k_z: z = 1 =$$

$$f_z S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i-l-1} \sum_{(j_s=2)}^{(j_i-s+1)} \sum_{j_i=s+1}^{l_s+s-k}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k}$$

$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{n_i - j_s + 1} \sum_{j_s=1}^{n_{is} + j_s - j_i - \mathbb{k}} \sum_{j_i=1}^{n_s - j_i + 1}
 \end{aligned}$$

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$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_s=n-j_i+1)}^{(n_i-j_i-\mathbb{k}+1)}$$

$$\frac{(n_i - n_s - \mathbb{k} - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i - \mathbb{k} + 1)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_i - l_s - s - 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{i=1}^{l-1} \sum_{(j_s=j_i-s)}^{l_s+s-k} \sum_{n_i=n+\mathbb{k}} \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{(n_{is}+j_s-n_s-j_i-s-2 \cdot \mathbb{k})}^{(n_{is}+j_s-n_s-j_i-s-2 \cdot \mathbb{k})} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^{-\mathbb{k}})}^{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^{-\mathbb{k}})}$$

$$\frac{(2 \cdot n_i - n_s - j_s - j_i - s - 2 \cdot \mathbb{k})!}{(2 \cdot n_i - n_s - j_s - j_i - n - 2 \cdot \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - j_s - s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=i}^{l-1} \sum_{(j_s=1)}^{(j_s=1)} \sum_{j_i=s}^{(j_i=s)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_i+j_{sa}^s-j_s-j_{sa}^{ik}+1)}^{(n_{ik}=n_i+j_{sa}^s-j_s-j_{sa}^{ik}+1)} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^{-\mathbb{k}})}^{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^{-\mathbb{k}})}$$

$$\frac{(2 \cdot n_i - n_s - j_s - j_i - s - 2 \cdot \mathbb{k} + 2)!}{(2 \cdot n_i - n_s - j_i - n - 2 \cdot \mathbb{k} + 1)! \cdot (n - s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$((D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s$$

$$(l_i \leq D + s - n) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^l - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s > 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned}
 f_{j_s, j_i}^{S_{DOSD}} &= \sum_{k=1}^{i^{l-1} (l_s - k + 1)} \sum_{(j_s=2)}^{l_i - k + 1} \sum_{j_i = j_s + s - 1} \\
 &\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{i_s} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_s = n - j_i}^{n_{i_s} + j_s - j_i - \mathbb{k}} \\
 &\frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \\
 &\frac{(n_{i_s} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{i_s} + j_s - n_s - \mathbb{k})!} \cdot \\
 &\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 &\frac{(l_s - l_i - k + 1)!}{(l_s - l_i - s + 1)!} \cdot \\
 &\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_s - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 &\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 &\sum_{k=i^l}^{()} \sum_{(j_s=1)}^{l_i - i^{l+1}} \sum_{j_i=s} \\
 &\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_s = n - j_i + 1)}^{(n_i - j_i - \mathbb{k} + 1)} \\
 &\frac{(n_i - n_s - \mathbb{k} - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i - \mathbb{k} + 1)!} \cdot \\
 &\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 &\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!} \cdot \\
 &\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!} -
 \end{aligned}$$

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$$\begin{aligned}
 & \sum_{k=1}^{i^{l-1} (l_s - k + 1)} \sum_{(j_s=2)} \sum_{j_i=j_s+s-1} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_i=n+\mathbb{k}-j_s)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_{sa}^s-\mathbb{k})}^{()} \\
 & \frac{(2 \cdot n_{is} + j_s - n_s - j_i - s - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_s - n_s - j_i - n - 2 \cdot \mathbb{k} - j_{sa}^s - j_{sa}^{ik} - (n + j_{sa}^s - j_{sa}^{ik} - s))!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - k + 1)! \cdot (j_s - 2)!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \\
 & \sum_{k=i^l} \sum_{(j_s=1)}^{()} \sum_{j_i=s} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_{is}+j_{sa}^s-j_s-j_{sa}^{ik}+1)}^{()} \sum_{n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-\mathbb{k}} \\
 & \frac{(2 \cdot n_i - n_s - j_s - j_i - s - 2 \cdot \mathbb{k} + 2)!}{(2 \cdot n_i - n_s - j_i - n - 2 \cdot \mathbb{k} + 1)! \cdot (n - s)!} \\
 & \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}
 \end{aligned}$$

$$\begin{aligned}
 & ((D \geq n < n \wedge l_s \leq D - n + 1 \wedge \\
 & 1 \leq j_s \leq j_i - s + 1 \wedge \\
 & j_s + s - 1 \leq j_i \leq n \wedge \\
 & l_{ik} - j_{sa}^s + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge \\
 & D + s - n < l_i \leq D + l_s + s - n - 1) \vee \\
 & (D \geq n < n \wedge l_s \leq D - n + 1 \wedge \\
 & 1 \leq j_s \leq j_i - s + 1 \wedge
 \end{aligned}$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^s, \dots, k, j_{sa}^i\} \quad s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \dots, i\} \wedge$$

$$s > 2 \wedge s = i + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$fz S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i^{l-1} (j_i - s + 1)} \sum_{(j_s=2)}^{l_s + s - k} \sum_{j_i = l_i + n - D}^{n_i + j_s - j_i - k} \sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_s = n - j_i + 1}^{n_i + j_s - j_i - k} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - k - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - k)!}$$

$$\begin{aligned}
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{i^{l-1} (n_s - l_s + 1)} \sum_{j_s=2}^{l_i - i^{l+1}} \sum_{j_i=l_s+s-i}^{n_i - j_s + 1} \sum_{n_i=n+k}^{n_i+j_s-j_i-k} \sum_{n_i+k-j_s+1}^{n_i+j_s-j_i-k} \sum_{j_i+1}^{n_i - n_s - 1} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - k - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - k)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=i^l}^{()} \sum_{j_s=1}^{l_i - i^{l+1}} \sum_{j_i=l_i+n-D}^{n} \sum_{n_i=n+k}^{(n_i-j_i-k+1)} \sum_{n_s=n-j_i+1}^{(n_i - n_s - k - 1)!} \\
 & \frac{(n_i - n_s - k - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i - k + 1)!}
 \end{aligned}$$

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$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \binom{()}{(j_s=j_i-s+1) j_s+l_s-k} \sum_{j_i=n-D}^{l_s+s-k}$$

$$\sum_{n_i=n}^n \sum_{(n_{is}=n+k-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{sa}^{ik} (n_{is}+k+j_s+j_{sa}^{ik}-j_i-j_{sa}^{ik})}$$

$$\frac{(2 \cdot n_{ik} + j_s - n_s - j_i - 2 \cdot k)!}{(2 \cdot n_{is} + 2 \cdot j_s - n_s - j_i - n - 2 \cdot k)! \cdot (n + j_{sa}^s - j_s - s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$(D \geq n < l_s \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < l_s \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s > 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$fz S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i^{l-1} (l_i + n - D - s)} \sum_{(j_s=2)}^{l_i - k + 1} \sum_{j_i = l_i + n - D}^{n} \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{(n_s = n - j_i + 1)}^{n_{is} + j_s - j_i - \mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{i-1} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)} \sum_{j_i=j_s+s-k}^{l_i-k+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_s=n+k-j_s)}^{(n_i-j_s+1)} \sum_{n_i=j_i+1}^{n_i+j_s-j_i-k}$$

$$\frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_s + 1)!} \cdot$$

$$\frac{(n_i - n_s - 1)!}{(j_i - 1)! \cdot (n_i + j_s - n_s - l_i - k)!} \cdot$$

$$\frac{(n_i - j_s - 1)!}{(n_i + j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(D - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^i \sum_{(j_s=1)}^{()} \sum_{j_i=l_i+n-D}^{l_i-i+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_s=n-j_i+1)}^{(n_i-j_i-k+1)}$$

$$\frac{(n_i - n_s - k - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i - k + 1)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!} \cdot$$

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$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)} \sum_{j_i=j_s+s-1} \sum_{n_i=n+k}^n \sum_{(n_{is}+k-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{ik}+j_s+j_{sa}^{ik}-l_s-k)}^{(j_s)} \frac{(2 \cdot n_{is} + j_s - n_s - j_i - s - 2)!}{(2 \cdot n_{is} + 2 \cdot j_s - n_s - j_i - n - 2)! \cdot (n_{is} - j_s - s)!} \cdot \frac{(l_s - n_{ik} - k + 1)! \cdot (j_s - 2)!}{(l_s - l_i)!} \cdot \frac{(D - j_i - n - l_i)! \cdot (n - j_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s \leq D - n + 1$

$1 \leq j_s \leq j_i - s + 1 \wedge$

$j_s + s - 1 \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + l_s = l_s \wedge l_{ik} + j_{sa}^{ik} - j_{sa} = l_i + j_{sa} - s > l_{sa} \wedge$

$D + s - n < l_i \leq D + l_s - n \leq n \wedge$

$D \geq n < n \wedge I = \mathbb{K} > 0 \wedge$

$j_{sa}^{ik} = j_{sa}^i \leq j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^i - 1 \wedge$

$s: \{j_{sa}^i, \mathbb{K}, j_{sa}^i\} \cup \{j_{sa}^s, \dots, j_{sa}^i, \mathbb{K}, j_{sa}^i\} \wedge$

$s > 2 \wedge s = j_{sa}^i + \mathbb{K} \wedge$

$$fz S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i^{l-1} (j_i - s + 1)} \sum_{(j_s=2)}^{l_{sa} + s - k - j_{sa} + 1} \sum_{j_i=l_i+n-D}$$

$$\begin{aligned}
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{s=2}^{i-1} \sum_{j_i=l_{sa}+s-k-j_{sa}+2}^{(l_{sa}-j_{sa}+2)}^{(l_{sa}-j_{sa}+2)} \sum_{j_i=l_{sa}+s-k-j_{sa}+2}^{l_i-k+1} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +
 \end{aligned}$$

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$$\begin{aligned}
 & \sum_{k=1}^{l_i} \sum_{(j_s=1)}^{l_i - l_i + 1} \sum_{j_i=l_i+n-D}^{l_i - l_i + 1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_s=n-j)}^{(n_i-j_i-k+1)} \\
 & \frac{(n_i - n_s - k - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i - k + 1)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n_s - j_i)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s - 1)! \cdot (j_i - s)!} \cdot \\
 & \frac{(l_i - 1)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{D+l_s+s} \sum_{(j_i=j_i-s+1)}^{l_i} \sum_{j_i=l_i+n-D}^{l_{sa}+s-k-j_{sa}+1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}}^{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^{ik})} \\
 & \frac{(2 \cdot n_{is} + j_s - n_s - j_i - s - 2 \cdot k)!}{(2 \cdot n_{is} + 2 \cdot j_s - n_s - j_i - n - 2 \cdot k - j_{sa}^s)! \cdot (n + j_{sa}^s - j_s - s)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_i - s + 1 \wedge$

$j_s + s - 1 \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s > 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$fz S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i^{l-1} (l_i + n - D - s)} \sum_{(j_s=2)}^{i^{l-k+1}} \sum_{j_i=n-D}^{i^{l-k+1}} \frac{\sum_{n_i=n+\mathbb{k}}^{(n_i-j_s)} \sum_{n_s=n+\mathbb{k}-j_s}^{n_{is}+j_s-j_i} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}}}{(j_s-2)! \cdot (n_i - n_{is} - 1)!} \cdot \frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - i_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{i^{l-1} (l_{sa} - k - j_{sa} + 2)} \sum_{(j_s=l_i+n-D-s+1)}^{i^{l-k+1}} \sum_{j_i=j_s+s-1}^{i^{l-k+1}} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

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$$\frac{(n_{is} - n_s - k - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - k)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!} \cdot$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot$$

$$\frac{(l_i)!}{(D + j_i - n - l_i)! \cdot (j_i)!} +$$

$$\sum_{k=1}^{l_i - i + 1} \sum_{l_i + n - D}^{l_i - i + 1}$$

$$\sum_{n_i = n + k}^n \sum_{(n_s = n - j_i + 1)}^{(n_i - j_i - k + 1)}$$

$$\frac{(n_i - n_s - k - 1)!}{(n_i - n_s - j_i - k + 1)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot$$

$$\sum_{k=1}^{D + l_s + s - n - l_i} \sum_{(j_s = l_i + n - D - s + 1)}^{(l_{sa} - k - j_{sa} + 2)} \sum_{j_i = j_s + s - 1}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s + 1)}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik}} \sum_{(n_s = n_{ik} + j_s + j_{sa}^{lk} - j_i - j_{sa}^s - k)}$$

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$$\frac{(2 \cdot n_{is} + j_s - n_s - j_i - s - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_s - n_s - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - j_{sa}^s)! \cdot (\mathbf{n} + j_{sa}^s - j_s - s)!}$$

$$\frac{(\mathbf{l}_s - k - 1)!}{(\mathbf{l}_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - l_i)!}$$

$$D \geq \mathbf{n} < \mathbf{n} \wedge \mathbf{l}_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - \mathbf{n} < l_i \leq D + l_s + s - \mathbf{n} - 1 \wedge$$

$$D \geq \mathbf{n} < \mathbf{n} \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}^i\} \vee \mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s > 2 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned} \sum_{j_s, j_i}^{OSD} &= \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(j_i-s+1)} \sum_{j_i=l_{sa}+\mathbf{n}+s-D-j_{sa}}^{l_{ik}+s-k-j_{sa}^{ik}+1} \\ &\sum_{n_i=\mathbf{n}+\mathbb{k}}^{\mathbf{n}} \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}} \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \\ &\frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!} \\ &\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \\ &\frac{(\mathbf{l}_s - k - 1)!}{(\mathbf{l}_s - j_s - k + 1)! \cdot (j_s - 2)!} \end{aligned}$$

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$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{i^{l-1} (l_{ik} - k - j_{sa}^{ik} + 2)} \sum_{(j_s=2)}^{l_{sa} + s - k - j_{sa} + 1} \sum_{j_i = l_{ik} + s - k - j_{sa}^{ik} + 2}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s)}^{(n_i - j_s + 1)} \sum_{(n_{is} = n - j_i + 1)}^{(n_i - j_s - j_i - \mathbb{k})}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_i - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(j_i - n_s - 1)!}{(j_i - 1)! \cdot (n_i + j_s - n_s - j_i - \mathbb{k})!} \cdot$$

$$\frac{(n_i + j_i - n - 1)!}{(n_i + j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(n_i - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=i^l}^{()} \sum_{(j_s=1)}^{l_{sa} + s - i^l - j_{sa} + 1} \sum_{j_i = l_{sa} + n + s - D - j_{sa}}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_s = n - j_i + 1)}^{(n_i - j_i - \mathbb{k} + 1)}$$

$$\frac{(n_i - n_s - \mathbb{k} - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i - \mathbb{k} + 1)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!} \cdot$$

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$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_i-s+1)}^{()} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{ik}+s-k-j_{sa}^{ik}+1} \sum_{n_i=n+k}^n \sum_{(n_{is}+k-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{ik}+j_s+j_{sa}^{ik}-j_i-k)}^{()} \frac{(2 \cdot n_{is} + j_s - n_s - j_i - s - 2 \cdot k)!}{(2 \cdot n_{is} + 2 \cdot j_s - n_s - j_i - n - 2 \cdot k)! \cdot (n_{is} + j_s - j_i - s)!} \cdot \frac{(l_s - k)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(n - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{ik} + j_{sa}^{ik} - j_{sa} > l_i \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 1 \wedge$$

$$j_{sa}^{lk} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^i, \dots, k, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k, j_{sa}^i\} \wedge$$

$$s > 2 \wedge s = j_{sa}^i + k \wedge$$

$$fz_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(l_{sa}+n-D-j_{sa})} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{sa}+s-k-j_{sa}+1}$$

$$\begin{aligned}
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=0}^{i-1} \sum_{j_i=j_s+s-1}^{(l_{ik}-j_{sa}+2) \cdot l_{sa}+s-k-j_{sa}+1}^{(l_{ik}-j_{sa}+2) \cdot l_{sa}+s-k-j_{sa}+1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +
\end{aligned}$$

$$\begin{aligned}
 & \sum_{k=1}^{\binom{D+l_s+s-n-l_i}{j_s=1}} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{sa}+s-i^{l-j_{sa}+1}} \\
 & \sum_{n_i=n+k}^n \sum_{(n_s=n-j)}^{(n_i-j_i-k+1)} \\
 & \frac{(n_i - n_s - k - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i - k + 1)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n_s - j_i)!} \cdot \\
 & \frac{(l_s - l_s - s + 1)!}{(l_s - j_i - l_s - 1)! \cdot (j_i - s)!} \cdot \\
 & \frac{\binom{D+l_s+s-n-l_i}{j_s=1}}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \\
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_{ik}-k-1+2)} \sum_{j_i=j_s+s-1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_s=n+k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-k)}^{\binom{D+l_s+s-n-l_i}{j_s=1}} \\
 & \frac{(2 \cdot n_{is} + j_s - n_s - j_i - s - 2 \cdot k)!}{(2 \cdot n_{is} + 2 \cdot j_s - n_s - j_i - n - 2 \cdot k - j_{sa}^s)! \cdot (n + j_{sa}^s - j_s - s)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \vee)$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^i, \mathbb{k}, j_{sa}^i\}$$

$$s > 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i^{l-1} (j_i - s + 1)} \sum_{(j_s=2)}^{l_s + s - k} \sum_{j_i = l_{sa} + n + s - D - j_{sa}}^{n_{is} + j_s - j_i - \mathbb{k}}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_s = n - j_i + 1}^{n_s - j_i + 1}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(l_s-k+1)} \sum_{j_i=l_s-k+1}^{l_{sa}+i-k-j_{sa}+1} \frac{(n - j_s + 1)!}{(j_s - 1)! \cdot (n_i - n_s - j_i - k + 1)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^n \sum_{(j_s=1)}^{(n - j_s + 1)} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{(l_{sa}+s-i-l-j_{sa}+1)} \frac{(n_i - n_s - k - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i - k + 1)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^n \sum_{(j_s=1)}^{(n - j_s + 1)} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{(l_{sa}+s-i-l-j_{sa}+1)} \frac{(n_i - n_s - k - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i - k + 1)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

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$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_i-s+1)}^{()} \sum_{j_i=l_{sa}+n+s-D-j_s}^{l_s+s-k} \sum_{n_i=n}^n \sum_{n_{ik}=n_{is}+j_s-k}^{()} \frac{(2 \cdot n_{is} + j_s - j_i - 2 \cdot k)!}{(2 \cdot n_{is} + 2 \cdot j_s - n_s - j_i - n - k - j_{sa}^s) \cdot (n + j_{sa}^s - j_s - s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\begin{aligned} & ((D \geq n < n \wedge l_s \leq D - n + 1) \vee (D \geq n < n \wedge l_s \leq D - n + 1)) \wedge \\ & 1 \leq j_s \leq j_i - s + 1 \wedge \\ & j_s - s - 1 \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge \\ & (D + s - n < l_i \leq D + l_s + s - n - 1) \vee \\ & (D \geq n < n \wedge l_s \leq D - n + 1) \wedge \\ & 1 \leq j_s \leq j_i - s + 1 \wedge \\ & j_i + s - 1 \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge \\ & (D + s - n < l_i \leq D + l_s + s - n - 1) \vee \\ & (D \geq n < n \wedge l_s \leq D - n + 1) \wedge \\ & 1 \leq j_s \leq j_i - s + 1 \wedge \end{aligned}$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1)) \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k, j_{sa}^i\} \wedge$$

$$s > 2 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$f_z^{S^{DOSD}} = \sum_{k=1}^{i-1} \sum_{j_s=l_{sa}+n-D-j_{sa}+1}^{l_s-k-j_{sa}+1} \sum_{j_i=n+lk}^{n+lk-j_s+1} \sum_{n_{is}=n-j_i-k}^{n_{is}+j_s-j_i-k} \frac{(n_i - n_{is} - 1)!}{(i - j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - k - 1)!}{(i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - k)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{i-1} \sum_{j_s=l_{sa}+n-D-j_{sa}+1}^{l_s-k-1} \sum_{j_i=j_s+s-1}^{l_{sa}+s-k-j_{sa}+1} \sum_{n_i=n+lk}^n \sum_{n_{is}=n+lk-j_s+1}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k}$$

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$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - s + 1)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(n - l_i)!}{(n - j_i - n + l_i)! \cdot (n - j_i)!}$$

$$\sum_{j_s=1}^{l_s} \sum_{j_i=l_s+n+s-D-j_s}^{n-l_s} \sum_{j_i=l_s+n+s-D-j_s}^{n-l_s} \dots$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_s=n-j_i+1)}^{(n_i-j_i-\mathbb{k}+1)}$$

$$\frac{(n_i - n_s - \mathbb{k} - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i - \mathbb{k} + 1)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_s-k-1)} \sum_{j_i=j_s+s-1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{\binom{()}{n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-k}} \frac{(2 \cdot n_{is} + j_s - n_s - j_i - s - 2 \cdot k)!}{(2 \cdot n_{is} + 2 \cdot j_s - n_s - j_i - n - 2 \cdot k - j_{sa}^s)! \cdot (n + j_{sa}^s - j_s - s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!} \cdot \frac{(D - l_i - k)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

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$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} = 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}^i\} \wedge$$

$$s \geq 2 \wedge s = s \Rightarrow$$

$$fz S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik})}^{(j_i-s+1)} \sum_{(l_{ik}+s-k-j_{sa}^{ik})}^{(l_{ik}+s-k-j_{sa}^{ik})} \sum_{(n_i=n-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_s=n-j_i+1)}^{(n_{is}+j_s-j_i)}$$

$$\frac{(n_i - n_{is} - 1)!}{(i - l_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{D-n+1} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik})}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{(j_i=l_{ik}+s-k-j_{sa}^{ik}+2)}^{(l_i-k+1)}$$

$$\sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{(n_{is}+j_s-j_i)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i - 1)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - 1)!}{(j_s + l_i - j_i - 1)! \cdot (j_i - j_s - 1)!} \cdot \frac{(n - l_i)!}{(n - j_i - 1)! \cdot (n - j_i)!} \cdot \sum_{k=0}^{l_s + s - n - j_i} \binom{n - j_i - k}{k} \sum_{j_i = l_i + n - D}^{j_{sa}^{ik} + 1} \sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s + 1)}^{(n_i - j_s + 1)} \sum_{k = n_{is} + j_{sa}^s - j_{sa}^{ik}} \binom{n_s}{k} \sum_{(n_s = n_{ik} + j_s + j_{sa}^{ik} - j_i - j_{sa}^s - k)} \frac{(3 \cdot n_{is} + j_s + j_{sa}^s - n_{ik} - n_s - j_i - j_{sa}^{ik} - s - 2 \cdot k)!}{(3 \cdot n_{is} + 2 \cdot j_s - n_{ik} - n_s - j_i - n - j_{sa}^{ik} - 2 \cdot k)!} \cdot \frac{1}{(n + j_{sa}^s - j_s - s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

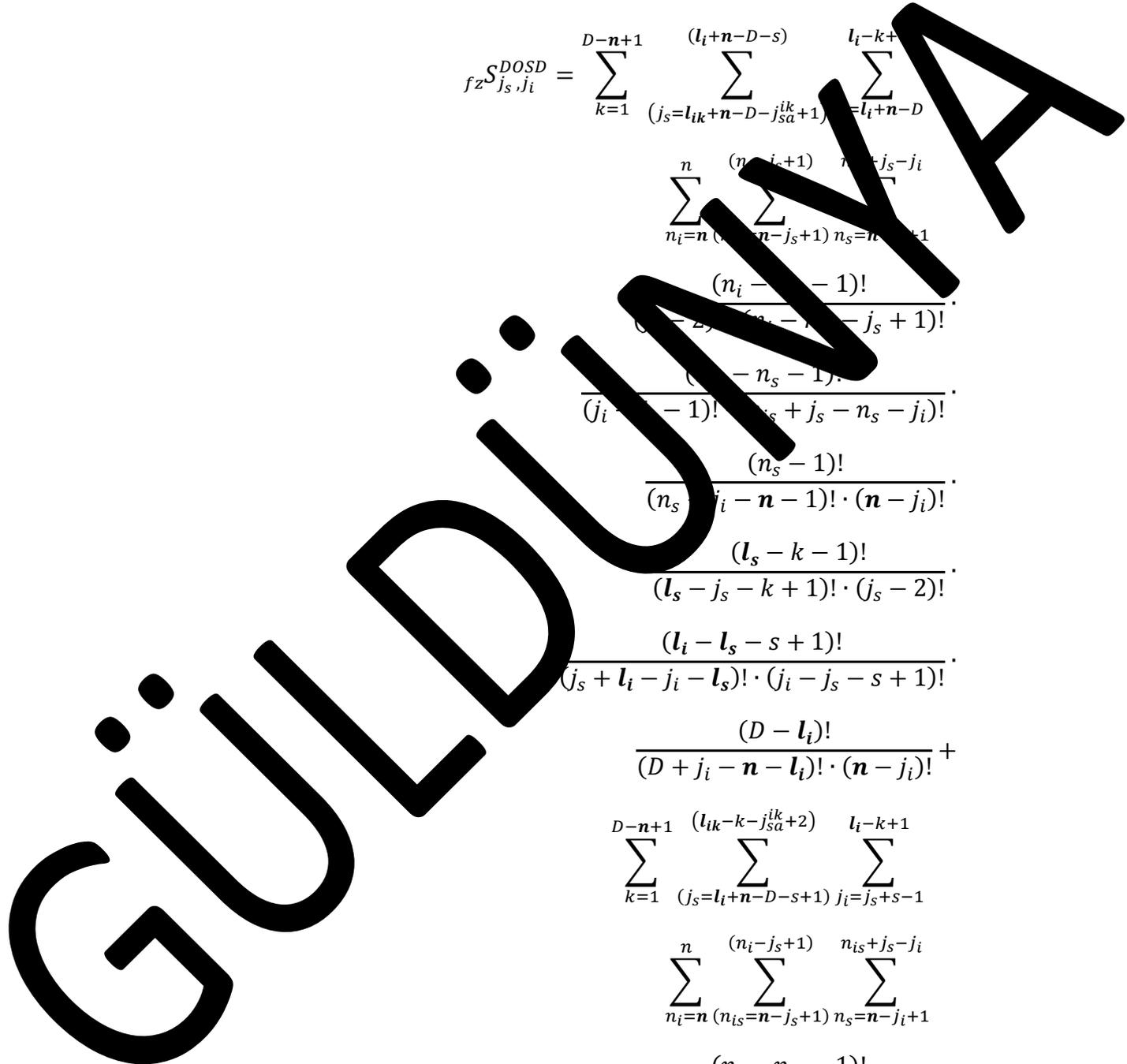
$D \geq n < n \wedge I = \mathbb{k} = 0 \wedge$

$j_{sa}^s \leq j_{sa}^i - 1 \wedge$

$s: \{j_{sa}^s, j_{sa}^i\} \wedge$

$s \geq 2 \wedge s = s \Rightarrow$

$$fz_{j_s, j_i}^{SDOSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_i+n-D-s)} \sum_{l_i-k+1}^{l_i-k+1} \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_i+j_s-j_i} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s - j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{D-n+1} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j_i=j_s+s-1}^{l_i-k+1} \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$



$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s - 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+1, \dots, D-s+1)}^{(l_{ik}-l_{is}^{ik}+2)} \sum_{j_i=j_s+1}^{n} \sum_{n_i=n+k}^{(n_i-j_s+1)} \sum_{(n_{is}=n+k)}^{(n_{is}-j_s+1)} \sum_{(n_{is}=n+k)}^{(n_{is}-j_s+1)} \sum_{(n_{is}=n+k)}^{(n_{is}-j_s+1)} \frac{(3 \cdot n_{is} + 2 \cdot j_{sa}^s - n_{ik} - n_s - j_i - j_{sa}^{ik} - s - 2 \cdot k)!}{(3 \cdot n_{is} + 2 \cdot j_{sa}^s - n_{ik} - n_s - j_i - n - j_{sa}^{ik} - 2 \cdot k)!} \cdot \frac{1}{(n + j_{sa}^s - j_s - s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s = D - n + 1 \wedge$$

$$2 \leq j_s \leq j_s - s + 1 \wedge$$

$$j_i + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D \geq n < n \wedge I = k = 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}^i\} \wedge$$

$s \geq 2 \wedge s = s \Rightarrow$

$$\begin{aligned}
 f_z S_{j_s, j_i}^{DOSD} = & \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(j_i-s+1)} \sum_{j_i=l_{ik}+n+s-D-j_{sa}^{ik}}^{l_s+s-k} \\
 & \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \\
 & \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \\
 & \frac{(l_i - l_s - s + 1)!}{(l_i + l_i - j_i - s)! \cdot (j_i - j_s - s + 1)!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)} \sum_{j_i=l_s+s-k+1}^{l_{ik}+s-k-j_{sa}^{ik}+1} \\
 & \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \\
 & \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}
 \end{aligned}$$

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$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_i-s+1)}^{(\)} \sum_{j_i=l_{ik}+n+s-D-j_{sa}^{ik}}^{l_s+s-k}$$

$$\sum_{n_i=n_{ik}+j_{sa}^{ik}}^n \sum_{n_{ik}+j_{sa}^{ik}-j_i-j_{sa}^{ik}}^{(j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}} \sum_{n_{ik}+j_{sa}^{ik}-j_i-j_{sa}^{ik}}^{(\)}$$

$$\frac{(3 \cdot n_{ik} + j_s + j_{sa}^{ik} - n_{ik} - n_{is} - j_i - j_{sa}^{ik} - 2 \cdot l_k)!}{(3 \cdot n_{is} + 2 \cdot j_s - n_{ik} - n_s - j_i - j_{sa}^{ik} - 2 \cdot l_k)!}$$

$$\frac{1}{(n + j_{sa}^s - j_s - s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D > n < n_{ik} > D - l_i + 1 \wedge$$

$$2 \leq i_c \leq j_i - s + 1 \wedge$$

$$j_c + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 \leq l_c \wedge l_{ik} - j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D > n \wedge I = l_k = 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^i \wedge$$

$$s: \{j_{sa}^i, j_{sa}^s\} \wedge$$

$$s \geq 2 \wedge s = s \Rightarrow$$

$$fz_{j_s, j_i}^{DOSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_{ik}+n-D-j_{sa}^{ik})} \sum_{j_i=l_{ik}+n+s-D-j_{sa}^{ik}}^{l_{ik}+s-k-j_{sa}^{ik}+1}$$

$$\begin{aligned}
& \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=1}^{D-n+1} \sum_{j_i=1}^{(l_s-k+1)} \sum_{j_i=j_s+s-1}^{l_{ik}+s-k-j_{sa}^{ik}+1} \\
& \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
\end{aligned}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_s-k+1)} \sum_{j_i=j_s+s-1} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_{sa}^s-k)}^{(\cdot)} \frac{(3 \cdot n_{is} + j_s + j_{sa}^s - n_{ik} - n_s - j_i - j_s - s - 2 \cdot \mathbb{k})!}{(3 \cdot n_{is} + 2 \cdot j_s - n_{ik} - n_s - j_i - j_s - s - n - j_{sa}^{ik} - 2 \cdot \mathbb{k})!} \cdot \frac{1}{(n + j_s - j_s - s)!} \cdot \frac{(l_s - k - j_s + k + 1)! \cdot (j_s - 2)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\begin{aligned} & ((D \geq n < n \wedge l_s > D - n + 1 \wedge \\ & 2 \leq j_s \leq j_i - s + 1 \wedge \\ & j_s + s - 1 \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik}) \vee \\ & (D \geq n < n \wedge l_s > D - n + 1 \wedge \\ & 2 \leq j_s \leq j_i - s + 1 \wedge \\ & j_s + s - 1 \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik}) \vee \\ & (D \geq n < n \wedge l_s > D - n + 1 \wedge \\ & 2 \leq j_s \leq j_i - s + 1 \wedge \\ & j_s + s - 1 \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik})) \wedge \\ & D \geq n < n \wedge I = \mathbb{k} = 0 \wedge \end{aligned}$$

$$j_{sa}^s \leq j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}^i\} \wedge$$

$$s \geq 2 \wedge s = s \Rightarrow$$

$$fz_{j_s, j_i}^{DOSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(j_i-s+1)} \sum_{j_i=l_i+n}^{l_s+s-k} \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s + j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(l_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)} \sum_{j_i=l_s+s-k+1}^{l_i-k+1} \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

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$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_i-s+1)}^{()} \sum_{j_i=n-D}^{l_s+s-k} \sum_{n_i=n}^n \sum_{(n_i=n+k-j_s+1)}^{()} \sum_{(n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik})}^{()} \sum_{(n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik})}^{()} \frac{(3 \cdot n_{is} + 2 \cdot j_{sa}^s - n_{ik} - j_i - j_{sa}^{ik} - s - 2 \cdot k)!}{(3 \cdot n_{is} + 2 \cdot j_{sa}^s - n_{ik} - n_s - j_i - n - j_{sa}^{ik} - 2 \cdot k)!} \cdot \frac{1}{(n + j_{sa}^s - j_s - s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D - n < n \wedge l_s > D - n + 1 \wedge 2 \leq j_s \leq j_i - s + 1 \wedge j_s + s - 1 \leq j_i \leq n \wedge l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik}) \vee (D - n \wedge l_s > D - n + 1 \wedge 2 \leq j_s \leq j_i - s + 1 \wedge j_s + s - 1 \leq j_i \leq n \wedge l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik}) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} = 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}^i\} \wedge$$

$$s \geq 2 \wedge s = s \Rightarrow$$

$$\begin{aligned}
 & \sum_{k=1}^{D-n+1} \sum_{j_s=l_i+n-D-s+1}^{(l_i+l_s-k-s)} \sum_{j_i=j_s+s-1}^{l_i-k+1} \\
 & \sum_{n_i=n}^n \sum_{n_{is}=n-j_s+1}^{(i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{D-n+1} \sum_{j_s=l_i+n-D-s+1}^{(l_s-k+1)} \sum_{j_i=j_s+s-1}^{l_i-k+1} \\
 & \sum_{n_i=n}^n \sum_{n_{is}=n-j_s+1}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i}
 \end{aligned}$$

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$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i - 1)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - 1)!}{(j_s + l_i - j_i - 1)! \cdot (j_i - j_s - 1)!} \cdot \frac{(n - l_i)!}{(n - l_i - 1)! \cdot (n - j_i)!} \cdot \sum_{k=1}^{l_s + s - n - l_i} \sum_{j_s = l_i + k}^{n - s + 1} \sum_{j_i = j_s + s - 1}^n \sum_{n_i = n + k}^n \sum_{n_{is} = n + k - j_s + 1}^{(n_i - j_s + 1)} \sum_{n_s = n_{ik} + j_s + j_{sa}^{ik} - j_i - j_{sa}^{ik} - k}^{(n_s - j_s + 1)} \frac{(3 \cdot n_{is} + j_s + j_{sa}^s - n_{ik} - n_s - j_i - j_{sa}^{ik} - s - 2 \cdot k)!}{(3 \cdot n_{is} + 2 \cdot j_s - n_{ik} - n_s - j_i - n - j_{sa}^{ik} - 2 \cdot k)!} \cdot \frac{1}{(n + j_{sa}^s - j_s - s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

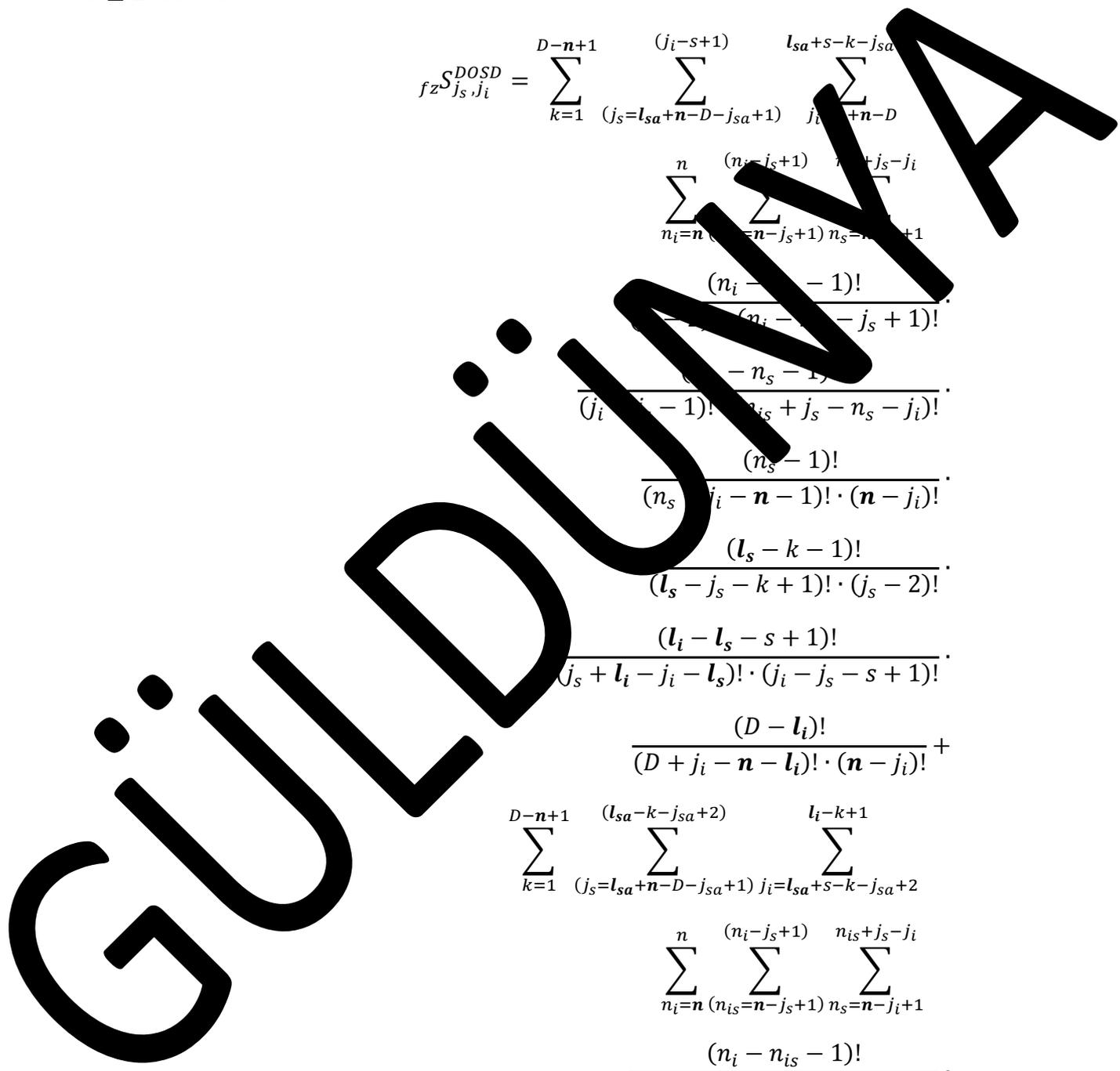
$D \geq n < n \wedge I = \mathbb{k} = 0 \wedge$

$j_{sa}^s \leq j_{sa}^i - 1 \wedge$

$s: \{j_{sa}^s, j_{sa}^i\} \wedge$

$s \geq 2 \wedge s = s \Rightarrow$

$$fzS_{j_s, j_i}^{DOSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(j_i-s+1)} \sum_{j_i=l_{sa}+s-k-j_{sa}}^{l_{sa}+s-k-j_{sa}} \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_i+j_s-j_i} \frac{(n_i - n_{is} - 1)!}{(n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_i - n_s - 1)!}{(j_i - n_{is} - 1)! \cdot (l_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s - j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_{sa}-k-j_{sa}+2)} \sum_{j_i=l_{sa}+s-k-j_{sa}+2}^{l_i-k+1} \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$



$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_i+k+1)}^{(j_s=l_s+s-j_{sa}+1)} \sum_{j_i=l_i+n-k}^{(n)} \sum_{n_i=n+k}^n \sum_{(n_i=j_s+1)}^{(n_i-j_s+1)} \sum_{(j_{sa}=n_{ik}+j_s+j_{sa}^i-j_i-j_{sa}^i-k)}^{(j_{sa}=n_{ik}+j_s+j_{sa}^i-j_i-j_{sa}^i-k)} \frac{(3 \cdot n_{is} + j_{sa}^s - n_{ik} - n_s - j_i - j_{sa}^{ik} - s - 2 \cdot k)!}{(3 \cdot n_{is} + 2 \cdot k - n_{ik} - n_s - j_i - n - j_{sa}^{ik} - 2 \cdot k)!} \cdot \frac{1}{(n + j_{sa}^s - j_s - s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n - 1) \wedge (l_s > D - n + 1) \wedge$$

$$D \geq n < n - 1 \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_s - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n - 1 \wedge I = k = 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^i - 1 \wedge$$

$s: \{j_{sa}^s, j_{sa}^i\} \wedge$

$s \geq 2 \wedge s = s \Rightarrow$

$$\begin{aligned}
 f_z S_{j_s, j_i}^{DOSD} = & \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_i+n-D-s)} \sum_{j_i=l_i+n-D}^{l_i-k+1} \\
 & \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{D-n+1} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{sa}-k-j_{sa}+2)} \sum_{j_i=j_s+s-1}^{l_i-k+1} \\
 & \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}
 \end{aligned}$$

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$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{sa}-k-j_{sa}+2)} \sum_{j_i=j_s+s-1}^{(j_s+1)}$$

$$\sum_{n_i=n}^n \sum_{n_i=n}^{(n+j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+1}^{(n_{ik}+j_s)} \sum_{n_{ik}=n_{ik}+j_s}^{(n_{ik}-j_i-j_{sa}^k)}$$

$$\frac{(3 \cdot n_{is} + j_s + j_{sa} - n_{ik} - j_i - j_{sa} - 2 \cdot k)!}{(3 \cdot n_{is} + 2 \cdot j_s - n_{ik} - n_s - j_{sa} - n - j_{sa}^{ik} - 2 \cdot k)!}$$

$$\frac{1}{(n + j_{sa}^s - j_s - s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n_{is} > D - s + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 \leq l_s \wedge l_{ik} - j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n_{is} \wedge I = k = 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^i \wedge$$

$$s \in \{j_{sa}, j_{sa}^i\} \wedge$$

$$s \geq 2 \wedge s = s \Rightarrow$$

$$fz_{j_s, j_i}^{DOSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(j_i-s+1)} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{ik}+s-k-j_{sa}^{ik}+1}$$

$$\begin{aligned}
 & \sum_{n_i=n}^n \sum_{n_{is}=n-j_s+1}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{l_i+1} \sum_{j_{sa}+1}^{(l_{ik-k-1}+2)} \sum_{j_i=l_{ik+s-k-j_{sa}+1}}^{l_{sa+s-k-j_{sa}+1}} \\
 & \sum_{n_i=n}^n \sum_{n_{is}=n-j_s+1}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -
 \end{aligned}$$

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$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_i-s+1)}^{(\quad)} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{ik}+s-k-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}}^{(\quad)} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_{sa}^{ik})}^{(\quad)}$$

$$\frac{(3 \cdot n_{is} + j_s + j_{sa}^s - n_{ik} - n_s - j_i - j_s + s - 2 \cdot k)!}{(3 \cdot n_{is} + 2 \cdot j_s - n_{ik} - n_s - j_i - j_s + s - k)!}$$

$$\frac{1}{(n + j_s - j_s - s)!}$$

$$\frac{(l_s - k)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_i - j_{sa}^{ik} + j_s = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_i \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge l_i = 0 \wedge$$

$$j_{sa}^s \leq j_s - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}^i\}$$

$$s > j_s = s \Rightarrow$$

$$f_z^{SDOSD}_{j_s, j_i} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_{sa}+n-D-j_{sa})} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{sa}+s-k-j_{sa}+1}$$

$$\sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D-l_i} \sum_{j_s=l_{sa}+n-D-j_{sa}+1}^{l_{ik}-k-j_{sa}^k+2} \sum_{j_i=j_s+s-1}^{n_{is}+j_s+1}$$

$$\sum_{n_{is}=n-j_s+1}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{j_s=l_{sa}+n-D-j_{sa}+1}^{(l_{ik}-k-j_{sa}^k+2)} \sum_{j_i=j_s+s-1}^{n_{is}+j_s+1}$$

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$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s)}^{()}$$

$$\frac{(3 \cdot n_{is} + j_s + j_{sa}^s - n_{ik} - n_s - j_i - j_{sa}^{ik} - s - 2 \cdot \mathbb{k})!}{(3 \cdot n_{is} + 2 \cdot j_s - n_{ik} - n_s - j_i - n - j_{sa}^s - 2 \cdot \mathbb{k})!}$$

$$\frac{(n - s - \mathbb{k} - 1)!}{(n - s - \mathbb{k} - 1)!}$$

$$\frac{(n - j_s - n_{ik} - 1)! \cdot (j_s - 2)!}{(D - n - l_i) \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$(l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa})) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} = 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^l - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}^l\} \wedge$$

$$s \geq 2 \wedge s = s \Rightarrow$$

$$fz_{j_s, j_i}^{DOSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(j_i-s+1)} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_s+s-k}$$

$$\sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i}^{n_{is}+j_s-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_s - l_s - s + 1)!}{(l_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)} \sum_{j_i=l_s+s-k+1}^{l_{sa}+s-k-j_{sa}+1}$$

$$\sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_i-s+1)}^{(\quad)} \sum_{j_i=l_{sa}+n+s-D-j_s}^{l_s+s-k}$$

$$\sum_{n_i=n}^n \sum_{n_i=n}^{(j_s+1)} \sum_{n_i=n}^{(j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s}^{(\quad)} \sum_{n_{ik}=n_{ik}+j_s}^{(\quad)} \sum_{n_{ik}=n_{ik}+j_s}^{(k-j_i-j_{sa}^{ik})}$$

$$\frac{(3 \cdot n_{is} + j_s + j_{sa}^{ik} - n_{ik} - j_i - j_{sa}^{ik} - 2 \cdot k)!}{(3 \cdot n_{is} + 2 \cdot j_s - n_{ik} - n_s - j_{sa}^{ik} - n - j_{sa}^{ik} - 2 \cdot k)!}$$

$$\frac{1}{(n + j_{sa}^{ik} - j_s - s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \wedge$$

$$D \geq n < n \wedge I = \mathbb{K} = 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}^i\} \wedge$$

$$s \geq 2 \wedge s = s \Rightarrow$$

$$f_z S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{D-n+1} \sum_{j_s=l_s+n-k}^{(l_{sa}+n-D-j_{sa})-l_{sa}+s-k} \sum_{j_i=l_{sa}+n+s-D}^{l_{sa}+s-k-j_{sa}+1} \frac{\binom{n}{n_i-j_s+1} \binom{n_{is}+j_s-j_i}{n_{is}-j_s+1}}{\binom{j_s-2}{j_s-2}! \cdot \binom{n_{is}-j_s+1}{n_{is}-j_s+1}!} \cdot \frac{\binom{j_s-n_s-1}{j_s-n_s-1}!}{(j_s-j_s-1)! \cdot \binom{n_{is}+j_s-n_s-j_i}{n_{is}+j_s-n_s-j_i}!} \cdot \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \frac{(l_i-l_s-s+1)!}{(j_s+l_i-j_i-l_s)! \cdot (j_i-j_s-s+1)!} \cdot \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \sum_{k=1}^{D-n+1} \sum_{j_s=l_{sa}+n-D-j_{sa}+1}^{(l_s-k-1)} \sum_{j_i=j_s+s-1}^{l_{sa}+s-k-j_{sa}+1} \frac{\binom{n}{n_i-j_s+1} \binom{n_{is}+j_s-j_i}{n_{is}-j_s+1}}{\binom{j_s-2}{j_s-2}! \cdot \binom{n_{is}-j_s+1}{n_{is}-j_s+1}!} \cdot \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 1)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{l_i!}{(D + j_i - n - l_i)! \cdot (j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{l_{sa}+n_{sa}+j_{sa}+j_{sa}^k = j_s+s-1}^{(l_s-k-1)} \sum_{n_i=n+1}^n \sum_{n_{is}=n+k-j_s+1}^{(n_i-j_s+1)} \sum_{l_{ik}=n_{is}+j_{sa}-j_{sa}^k}^{(n_s=n_{ik}+j_s+j_{sa}^k-j_i-j_{sa}^k)} \frac{(n_{is} + j_s + l_i - n_{ik} - n_s - j_i - j_{sa}^k - s - 2 \cdot k)!}{(3 + 2 \cdot k - n_{ik} - n_s - j_i - n - j_{sa}^k - 2 \cdot k)!} \cdot \frac{1}{(n + j_{sa}^s - j_s - s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n + l_s \leq D - n + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$l_i \leq D + s - n \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} = 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}^i\} \wedge$$

$$s \geq 2 \wedge s = s \Rightarrow$$

$$fz S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i^{l-1} (j_i - s + 1) l_{ik} + s - k - j_{sa}^{ik}} \sum_{(j_s=2)} \sum_{j_i=s+1} \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)} \sum_{n_s=n-j_i+1}^{(n_i - j_s - j_i)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_i - n_s - 1)!}{(j_i - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s - j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{i^{l-1} (l_{ik} - k - j_{sa}^{ik} + 2)} \sum_{(j_s=2)} \sum_{j_i=l_{ik} + s - k - j_{sa}^{ik} + 2}^{l_i - k + 1} \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)} \sum_{n_s=n-j_i+1}^{(n_i - j_s + 1)} \sum_{n_s=n-j_i+1}^{n_{is} + j_s - j_i} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\begin{aligned}
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{j_s=1}^{()} \sum_{j_i=1}^{i^{l+1}} \frac{(n_i - j_i + 1)!}{\sum_{n_i=n}^{(n_s - l - j_i + 1)} (n_i - j_i + 1)!} \cdot \\
 & \frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!} \cdot \\
 & \sum_{k=1}^{i^{l-1}} \sum_{(j_s=j_i-s+1)}^{()} \sum_{j_i=s+1}^{l_{ik}+s-k-j_{sa}^{ik}+1} \cdot \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \cdot \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-\mathbb{k})}^{()} \\
 & \frac{(3 \cdot n_{is} + j_s + j_{sa}^s - n_{ik} - n_s - j_i - j_{sa}^{ik} - s - 2 \cdot \mathbb{k})!}{(3 \cdot n_{is} + 2 \cdot j_s - n_{ik} - n_s - j_i - n - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}
 \end{aligned}$$

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$$\frac{1}{(n + j_{sa}^s - j_s - s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - \dots)}$$

$$\sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(j_s)} \sum_{j_i=s}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{ik}=n_{is}-j_{sa}^{ik})}^{(j_s)} \sum_{n_s=n_{ik}+j_{sa}^{ik}-j_i-j_{sa}^s}$$

$$\frac{(3 \cdot n_i - n_{is} - n_s - j_s - j_i - 2 \cdot k + 3)!}{(3 \cdot n_i - n_{is} - n_s - j_s - j_i - 2 \cdot k + 2) \cdot (n - s)!} \cdot \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$D \geq n < n \wedge l_i \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_i - s + 1 \wedge$

$j_s + s - 1 \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s - j_{sa}^{ik} + j_{sa}^{ik} - s > 0 \wedge$

$D > n < n \wedge k = 0$

$j_{sa}^s \leq j_{sa}^i - 1 \wedge$

$\{j_{sa}^s, j_{sa}^i\} \wedge$

$s \geq 2 \wedge s = 3$

$$fz_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(j_s)} \sum_{j_i=j_s+s-1}^{l_{ik}-k-j_{sa}^{ik}+2} \frac{l_{i-k+1}}{(n_i - j_s + 1) \cdot (n_{is} + j_s - j_i)} \cdot \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!} \cdot$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot$$

$$\frac{(l_i)!}{(D + j_i - n - l_i)! \cdot (j_i)!} +$$

$$\sum_{k=1}^{i-1} \sum_{j_i=s}^{l_i-i^k} \binom{l_i-i^k}{j_i}$$

$$\sum_{n_i=n}^n \sum_{(n_s=n-j_i+1)}^{(n_i-j_i+1)}$$

$$\frac{(n_i - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_i - n_s - j_i + 1)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - j_s - s)!} \cdot$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!} \cdot$$

$$\sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j_i=j_s+s-1}^{(l_{ik}-k-j_{sa}^{ik}+2)}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-k)}^{(n_{ik}-k-j_{sa}^{ik}+2)}$$

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$$\frac{(3 \cdot n_{is} + j_s + j_{sa}^s - n_{ik} - n_s - j_i - j_{sa}^{ik} - s - 2 \cdot \mathbb{k})!}{(3 \cdot n_{is} + 2 \cdot j_s - n_{ik} - n_s - j_i - n - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}$$

$$\frac{1}{(n + j_{sa}^s - j_s - s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{i-1} \sum_{(j_s=1)}^{j_s} \sum_{j_i}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik} - j_s - j_{sa}^s = n_{ik} + j_s + j_{sa}^{ik} - j_i - j_{sa}^{ik} - \mathbb{k})}$$

$$\frac{(3 \cdot n_i - n_{ik} - n_s - j_s - j_i - 2 \cdot \mathbb{k} + 3)!}{(3 \cdot n_i - n_{ik} - j_{ik} - j_i - 2 \cdot \mathbb{k} + 2)! \cdot (n - s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$D \geq n < n \wedge l_s \leq D - n + 1$

$1 \leq j_s \leq j_i - s + 1 \wedge$

$j_i + s - 1 \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s - l_i + j_{sa}^{ik} - s \geq j_{ik} \wedge$

$D + s - n < l_i \leq D + j_i + s - n - 1 \wedge$

$D \geq n < n \wedge \mathbb{k} = \mathbb{k} \wedge$

$j_{sa}^s - j_{sa}^i = 1 \wedge$

$s: \{j_{sa}^s, j_{sa}^i\}$

$s \geq j_{sa}^s = s \Rightarrow$

$$fz S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{j_s} \sum_{j_i=l_i+n-D}^{l_{ik}+s-k-j_{sa}^{ik}+1}$$

$$\begin{aligned}
 & \sum_{n_i=n}^n \sum_{n_{is}=n-j_s+1}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=2}^{l_i-1} \sum_{j_i=l_{ik}+s-k-j_{s_a}^{ik}+2}^{(l_{ik}-j_{s_a}^{ik}+2)} \sum_{j_i=l_{ik}+s-k-j_{s_a}^{ik}+2}^{l_i-k+1} \\
 & \sum_{n_i=n}^n \sum_{n_{is}=n-j_s+1}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +
 \end{aligned}$$

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$$\begin{aligned}
& \sum_{k=1}^{D+l_s+s-l_i} \sum_{(j_s=1)}^{()} \sum_{j_i=l_i+n-D}^{l_i-l+1} \\
& \sum_{n_i=n}^n \sum_{(n_s=n-j)}^{(n_i-j_i+1)} \\
& \frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n_s - 1)! \cdot (n_s - j_i)!} \cdot \\
& \frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s - 1)! \cdot (j_i - s)!} \cdot \\
& \frac{()}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{k=1}^{D+l_s+s-l_i} \sum_{(j_i=j_i-s+1)}^{()} \sum_{j_i=l_i+n-D}^{l_{ik}+s-k-j_{sa}^{ik}+1} \\
& \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{()} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-k)}^{()} \\
& \frac{(n_{is} + j_s + j_{sa}^s - n_{ik} - n_s - j_i - j_{sa}^{ik} - s - 2 \cdot k)!}{(3 \cdot n_{is} + 2 \cdot j_s - n_{ik} - n_s - j_i - n - j_{sa}^{ik} - 2 \cdot k)!} \cdot \\
& \frac{1}{(n + j_{sa}^s - j_s - s)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
\end{aligned}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} = 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}^i\} \wedge$$

$$s \geq 2 \wedge s = s \Rightarrow$$

$$fz_{j_s, j_i}^{DOSD} = \sum_{k=1}^{l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_i+n-D-s+1)} \sum_{j_i=l_i+n-D}^{(l_i+n-D-s+1)} \sum_{n_i=n}^{(n_i-j_s+1)} \sum_{(n_{is}=n-j_s+1)}^{(n_{is}+j_s-j_i)} \sum_{n_s=n-j_i+1}^{(n_s+n-j_i+1)} \frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{i-l-1} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j_i=j_s+s-1}^{l_i-k+1} \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i}$$

$$\begin{aligned}
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - s + 1)! \cdot (j_i - j_s - s + 1)!} \cdot \\
& \frac{(n - l_i)!}{(n - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{k=1}^{l+1} \sum_{j_s=1}^{n-l+1} \sum_{j_i=l_i+n-D}^{n-l+1} \\
& \sum_{n_i=n}^n \sum_{n_s=n-j_i+1}^{(n_i-j_i+1)} \\
& \frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{ik}-k-j_{s\bar{a}}^{ik}+2)} \sum_{j_i=j_s+s-1}^{n-l+1} \\
& \sum_{n_i=n+k}^n \sum_{n_{is}=n+k-j_s+1}^{(n_i-j_s+1)}
\end{aligned}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-k)}$$

$$\frac{(3 \cdot n_{is} + j_s + j_{sa}^s - n_{ik} - n_s - j_i - j_{sa}^{ik} - s - 2 \cdot k)!}{(3 \cdot n_{is} + 2 \cdot j_s - n_{ik} - n_s - j_i - n - j_{sa}^{ik} - 2 \cdot k)!}$$

$$\frac{1}{(n + j_{sa}^s - j_s - k)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - l_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n$$

$$D \geq n < n \wedge l = k = 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}^i\} \wedge$$

$$s \geq 2 \wedge s = s - 1$$

$$fz_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(j_i-s+1)} \sum_{j_i=l_{ik}+n+s-D-j_{sa}^{ik}}^{l_s+s-k} \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\begin{aligned}
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{i^{l-1}} \sum_{(j_s=1)}^{(l_s - l_i + s - j_i - j_s + 1)^{ik+1}} \sum_{j_i=l_i+s-k}^{(n_i - j_s) \quad n_{is} + j_s - j_i} \\
 & \sum_{n_i=n}^{(n_i - j_s)} \sum_{(n_{is}=n - j_s + 1)}^{(n_{is} + j_s - j_i)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_s - n_s - 1)!}{(j_i - 2)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{i^l} \sum_{(j_s=1)}^{(l_{ik} + s - i^l - j_{sa}^{ik} + 1)} \sum_{j_i=l_{ik} + n + s - D - j_{sa}^{ik}} \\
 & \sum_{n_i=n}^n \sum_{(n_s=n - j_i + 1)}^{(n_i - j_i + 1)} \\
 & \frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!} \cdot
 \end{aligned}$$

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$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_i-s+1)}^{()} \sum_{j_i=l_{ik}+n+l_s-s-k}^{l_s+s-k} \sum_{n_i=n}^{D-j_{sa}^{ik}}$$

$$\sum_{n_i=n}^n \sum_{n_{is}=n+l_k-j_s+1}^{()}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}(n_{is}+j_s+j_{sa}^{ik}-j_i-j_{sa}^{ik})}^{()}$$

$$\frac{(3 \cdot n_{is} + j_{sa}^s - n_{ik} - j_i - j_{sa}^{ik} - s - 2 \cdot l_k)!}{(3 \cdot n_{is} + 2 \cdot n_{ik} - n_{ik} - n_s) (j_i - n - j_{sa}^{ik} - 2 \cdot l_k)!}$$

$$\frac{1}{(n + j_{sa}^s - j_s - s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_s + 1 \wedge$$

$$j_s + 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$l_i < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = l_k = 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}^i\} \wedge$$

$$s \geq 2 \wedge s = s \Rightarrow$$

$$\begin{aligned}
 f_{j_s, j_i}^{DOSD} = & \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(l_{ik}+n-D-j_{sa}^{ik})} l_{ik+s-k-j_{sa}^{ik}+1} \sum_{j_i=l_{ik}+n+s-D-j_{sa}^{ik}} \\
 & \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \\
 & \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \\
 & \frac{(l_i + l_s - s + 1)!}{(l_i + l_s - j_i - s)! \cdot (j_i - j_s - s + 1)!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{i-1} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_s-k+1)} l_{ik+s-k-j_{sa}^{ik}+1} \sum_{j_i=j_s+s-1} \\
 & \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \\
 & \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}
 \end{aligned}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^i \sum_{(j_s=1)}^{l_{ik}+s-i-l-j_{sa}^{ik}+1} \sum_{j_i=l_{ik}+n+s-D-j_{sa}^{ik}}^{l_{ik}+s-i-l-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+k}^n \sum_{n_i=n+k}^{n-j_i+1}$$

$$\frac{(n_s - n_s - 1)!}{(i - 2)! \cdot (n_s - j_i + 1)!} \cdot$$

$$\frac{(n_s - n - 1)! \cdot (n - j_i)!}{(n_s - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

$$\sum_{k=1}^{D+l_s+n-l_i} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_s-k+1)} \sum_{j_i=j_s+s-1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_i=n+k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-k)}^{()}$$

$$\frac{(3 \cdot n_{is} + j_s + j_{sa}^s - n_{ik} - n_s - j_i - j_{sa}^{ik} - s - 2 \cdot k)!}{(3 \cdot n_{is} + 2 \cdot j_s - n_{ik} - n_s - j_i - n - j_{sa}^{ik} - 2 \cdot k)!} \cdot$$

$$\frac{1}{(n + j_{sa}^s - j_s - s)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

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$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$l_i \leq D + s - n) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} = 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}^i\} \wedge$$

$$s \geq 2 \wedge s = s \Rightarrow$$

$$fz_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i^{l-1} (j_i - s + 1) l_s + s - k} \sum_{(j_s=2)} \sum_{j_i=s+1} \\ \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i - j_s + 1)} \sum_{n_s=n-j_i+1}^{n_{is} + j_s - j_i} \\ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s + j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\ \sum_{k=1}^{i^{l-1} (l_s - k + 1)} \sum_{(j_s=2)} \sum_{j_i=l_s + s - k + 1}^{l_i - k + 1} \\ \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i - j_s + 1)} \sum_{n_s=n-j_i+1}^{n_{is} + j_s - j_i} \\ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

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$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - l_i)!} +$$

$$\sum_{j_s=1}^{(l_i - l_s + 1)} \sum_{l_i=s}^{(l_i - l_s + 1)}$$

$$\sum_{n_s=n-j_i+1}^n \sum_{(n_s=n-j_i+1)}$$

$$\frac{(n_i - n_s - j_i + 1)!}{(j_i - n_s - 1)! \cdot (n_i - n_s - j_i + 1)!}$$

$$\frac{(n_s - j_i - n - 1)! \cdot (n - j_i)!}{(n_s - j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_i - l_s + 1)! \cdot (j_i - s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!} -$$

$$\sum_{k=1}^{i-1} \sum_{(j_s=j_i-s+1)}^{()} \sum_{j_i=s+1}^{l_s+s-k}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_i=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-\mathbb{k})}^{()}$$

$$\frac{(3 \cdot n_{is} + j_s + j_{sa}^s - n_{ik} - n_s - j_i - j_{sa}^{ik} - s - 2 \cdot \mathbb{k})!}{(3 \cdot n_{is} + 2 \cdot j_s - n_{ik} - n_s - j_i - n - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}$$

$$\frac{1}{(n + j_{sa}^s - j_s - s)!}$$

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$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^n \sum_{(j_s=1)}^{(\cdot)} \sum_{j_i=1}^{(\cdot)} \sum_{n_i=n+k}^n \sum_{(n_{ik}=n_i-j_s-j_{sa}^{ik})}^{(\cdot)} \sum_{n_s=n_{ik}+j_s-j_{sa}^{ik}-j_{sa}^{ik}}^{(\cdot)}$$

$$\frac{(3 \cdot n_i - n_{ik} - n_s - j_s - j_{ik} - j_{sa}^{ik} - 2 \cdot k + 1)!}{(3 \cdot n_i - n_{ik} - n_s - j_{ik} - j_{sa}^{ik} - n - 2 \cdot k + 2)! \cdot (n - s)!} \cdot \frac{(D - s - n - l_i)!}{(n - s)!}$$

$$((D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$l_{ik} \leq (l_i + j_{sa}^{ik} - n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$(l_i \leq D + s - n) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} = 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}^i\} \wedge$$

$$s \geq 2 \wedge s = s \Rightarrow$$

$$\begin{aligned}
 & \sum_{j_s, j_i}^{DOS} \sum_{(j_s=2)}^{l_s-k} \sum_{j_i=j_s+s-1}^{l_i-k+1} \\
 & \sum_{n_i}^{n_i} \sum_{(n_{is}=n-j_s+1)}^{(n_i-1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +
 \end{aligned}$$

$$\sum_{k=i}^{()} \sum_{j_s=1}^{l_i-i+1} \sum_{j_i=s}$$

$$\sum_{n_i=\mathbf{n}}^n \sum_{(n_s=\mathbf{n}-j_i+1)}^{(n_i-j_i+1)} \frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \frac{(l_i - l_s - s - 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!} \cdot \frac{(D - l_i)!}{(D + s - l_i)! \cdot (\mathbf{n} - l_i)!} \cdot \sum_{i=1}^{l-1} \sum_{(j_s=2)}^{(l_s-1)} \sum_{j_s=s-1}^{s+s-1} \sum_{n_i=\mathbf{n}+\mathbb{k}} \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{is}+j_{sa}^{is}-j_{sa}^{ik} \mid n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^{is}-\mathbb{k})}^{(\)} \frac{(3 \cdot n_{is} + j_s + j_{sa}^{is} - n_{ik} - n_s - j_i - j_{sa}^{ik} - s - 2 \cdot \mathbb{k})!}{(3 \cdot n_{is} + j_s - n_{ik} - n_s - j_i - \mathbf{n} - j_{sa}^{ik} - 2 \cdot \mathbb{k})!} \cdot \frac{1}{(\mathbf{n} + j_{sa}^{is} - j_s - 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 - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} \cdot \sum_{k=i}^{l-1} \sum_{(j_s=1)}^{(\)} \sum_{j_i=s}^{(\)}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{ik}=n_i-j_s-j_{sa}^{ik})}^{(\)} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^{is}-\mathbb{k})}^{(\)}$$

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$$\frac{(3 \cdot n_i - n_{ik} - n_s - j_s - j_{ik} - j_i - s - 2 \cdot \mathbb{k} + 3)!}{(3 \cdot n_i - n_{ik} - n_s - j_{ik} - j_i - n - 2 \cdot \mathbb{k} + 2)! \cdot (n - s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$((D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1)$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_i - s + 1 = l_s \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} = 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}^i\} \wedge$$

$$s \geq 2 \wedge s = s \Rightarrow$$

$$fzS_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(j_i-s+1)} \sum_{j_i=l_i+n-D}^{l_s+s-k}$$

$$\sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(l_s-k+1)} \sum_{j_i=l_s+s-k+1}^{l_i-k+1}$$

$$\sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

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$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{l_i} \sum_{(j_s=1)}^{l_i - i + 1} \sum_{j_i=l_i+n-l_s}^{l_i - i + 1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{n - j_i + 1}$$

$$\frac{(n_i - n_s - 1)!}{(i - 2)! \cdot (n_i - n_s - j_i + 1)!} \cdot$$

$$\frac{(n_s - i - n - 1)!}{(n - j_i)!} \cdot$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_i-s+1)}^{l_s+s-k} \sum_{j_i=l_i+n-D}^{l_s+s-k}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s - j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik} - j_i - j_{sa}^s - l_k)}$$

$$\frac{(3 \cdot n_{is} + j_s + j_{sa}^s - n_{ik} - n_s - j_i - j_{sa}^{ik} - s - 2 \cdot l_k)!}{(3 \cdot n_{is} + 2 \cdot j_s - n_{ik} - n_s - j_i - n - j_{sa}^{ik} - 2 \cdot l_k)!} \cdot$$

$$\frac{1}{(n + j_{sa}^s - j_s - s)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

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$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \wedge$$

$$D \geq n < n \wedge l = k = 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^l - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}^l\} \wedge$$

$$s \geq 2 \wedge s = s \Rightarrow$$

$$\begin{aligned}
fz_{j_s, j_i}^{DOSD} &= \sum_{k=1}^{i^{l-1} (l_i+n-D-s)} \sum_{(j_s=2)}^{l_i-k+1} \sum_{j_i=l_i+n-D}^{l_i-k+1} \\
&\sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i}^{n_{is}+j_s-j_i} \\
&\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
&\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
&\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
&\frac{(l_s - j_s - k + 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
&\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
&\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!} + \\
&\sum_{k=1}^{i^{l-1}} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)} \sum_{j_i=j_s+s-1}^{l_i-k+1} \\
&\sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \\
&\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
&\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
&\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
&\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
&\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot
\end{aligned}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{l_i} \sum_{j_s=1}^{l_i - k} \sum_{j_i=l_i+n-D}^{l_i - k + 1}$$

$$\sum_{n_i=n+l_k}^n \sum_{n_i=n+l_k-j_s+1}^{n_i-j_s+1}$$

$$\frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - j_i + 1)!} \cdot$$

$$\frac{(n_i - j_s - 1)!}{(n_i + j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_i - j_s - 1)!}{(l_i - j_s - l_s + 1)! \cdot (j_i - s)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

$$\sum_{k=1}^{l_s+s-n-l_i} \sum_{j_s=l_i+n-D-s+1}^{l_s-k+1} \sum_{j_i=j_s+s-1}$$

$$\sum_{n_i=n+l_k}^n \sum_{n_i=n+l_k-j_s+1}^{n_i-j_s+1}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^{ik}}^{l_i-k}$$

$$\frac{(3 \cdot n_{is} + j_s + j_{sa}^s - n_{ik} - n_s - j_i - j_{sa}^{ik} - s - 2 \cdot k)!}{(3 \cdot n_{is} + 2 \cdot j_s - n_{ik} - n_s - j_i - n - j_{sa}^{ik} - 2 \cdot k)!} \cdot$$

$$\frac{1}{(n + j_{sa}^s - j_s - s)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} = 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}^i\} \wedge$$

$$s \geq 2 \wedge s = s \Rightarrow$$

$$fz S_{j_s j_i}^{DOS} \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(j_i-s-k-j_{sa}+2)} \sum_{j_i=l_{sa}+s-k-j_{sa}+2}^{l_i-k+1} \frac{(n_i - n_{is} - 1)!}{(i - j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(l_{sa}-k-j_{sa}+2)} \sum_{j_i=l_{sa}+s-k-j_{sa}+2}^{l_i-k+1}$$

$$\sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i}$$

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$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - s + 1)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(n - l_i)!}{(n - l_i - 1)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{l_s} \sum_{j_s=1}^{()} \sum_{j_i=l_i+n-D}^{l_s+1}$$

$$\sum_{n_i=n}^n \sum_{n_s=n-j_i+1}^{(n_i-j_i+1)}$$

$$\frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_i-s+1)}^{()} \sum_{j_i=l_i+n-D}^{l_{sa}+s-k-j_{sa}+1}$$

$$\sum_{n_i=n+k}^n \sum_{n_{is}=n+k-j_s+1}^{(n_i-j_s+1)}$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{()} (n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-k)$$

$$\frac{(3 \cdot n_{is} + j_s + j_{sa}^s - n_{ik} - n_s - j_i - j_{sa}^{ik} - s - 2 \cdot k)!}{(3 \cdot n_{is} + 2 \cdot j_s - n_{ik} - n_s - j_i - n - j_{sa}^{ik} - 2 \cdot k)!}$$

$$\frac{1}{(n + j_{sa}^s - j_s - k)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - l_i)!}$$

$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_i - s + 1 \wedge$

$j_s + s - 1 \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} - k + j_{sa} - s > l_{sa} \wedge$

$D + s - n < l_i \leq D + l_s + s - n$

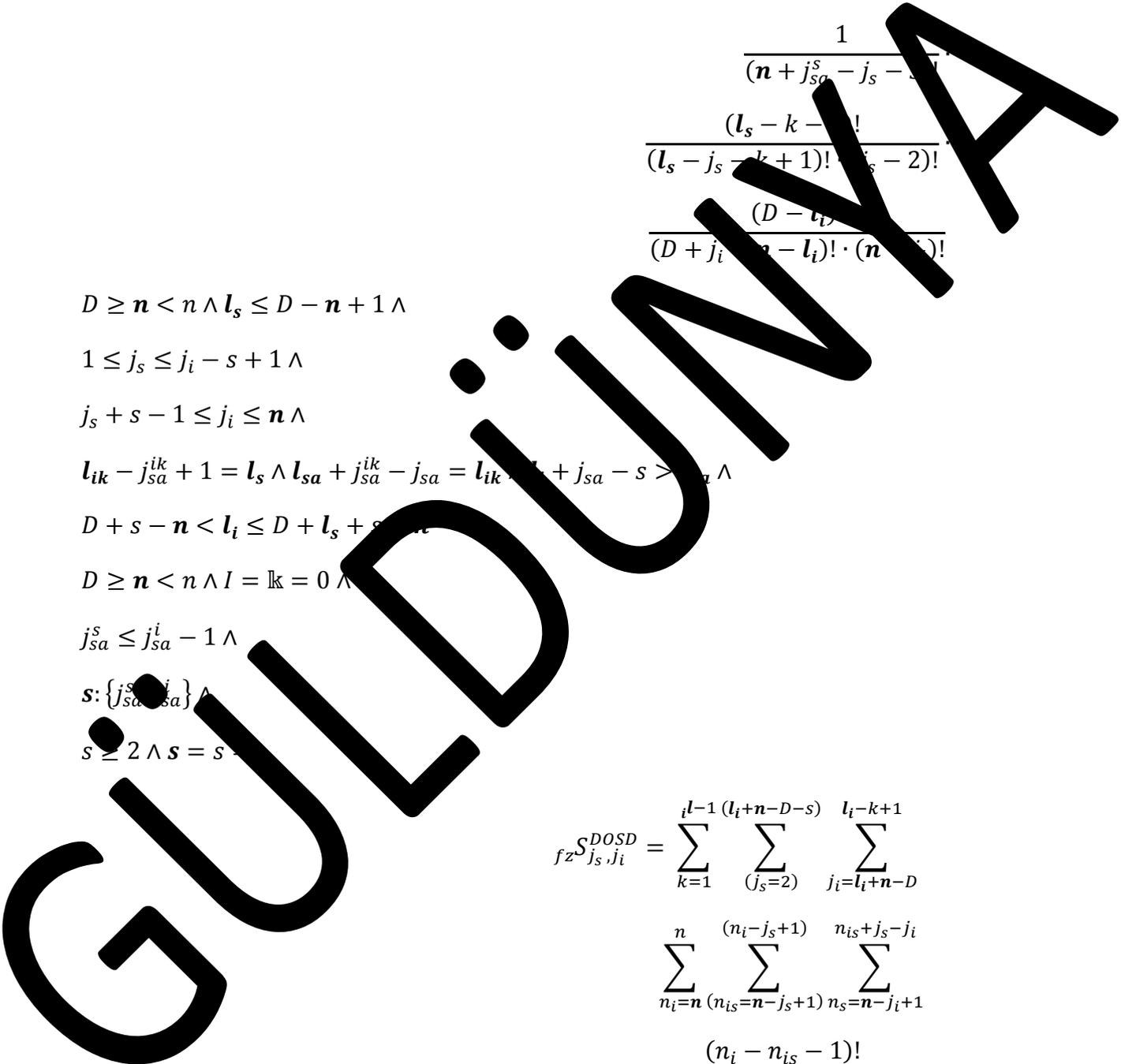
$D \geq n < n \wedge I = k = 0 \wedge$

$j_{sa}^s \leq j_{sa}^i - 1 \wedge$

$s: \{j_{sa}^s, j_{sa}^i\} \wedge$

$s \geq 2 \wedge s = s - 1$

$$fz S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(l_i+n-D-s)} \sum_{j_i=l_i+n-D}^{l_i-k+1} \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$



$$\begin{aligned}
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \\
 & \sum_{k=1}^{i-1} \sum_{(j_s=l_i+k-1) \cap (j_s=2-s+1)}^{(l_{sa}-k-1) \cap (l_s-k+1)} \sum_{(j_i=j_s+k)}^{(l_i-k+1)} \\
 & \sum_{n_i=n}^{(n_i-j_s)} \sum_{(n_{is}=n-j_s+1)}^{(n_{is}+j_s-j_i)} \sum_{(j_i-j_s+1)}^{(j_i-j_s)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_s - n_s - 1)!}{(j_i - 2)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{i-1} \sum_{(j_s=1)}^{()} \sum_{j_i=l_i+n-D}^{l_i-i+1} \\
 & \sum_{n_i=n}^n \sum_{(n_s=n-j_i+1)}^{(n_i-j_i+1)} \\
 & \frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!}
 \end{aligned}$$

GÜLDÜM YA

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{sa}-k-j_{sa}+2)} \sum_{j_{sa}+s-1}$$

$$\sum_{n_i=n}^n \sum_{(n_{is}=n+k-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^{ik})}$$

$$\frac{(3 \cdot n_{is} + j_{sa}^s - n_{ik} - j_i - j_{sa}^{ik} - s - 2 \cdot k)!}{(3 \cdot n_{is} + 2 \cdot n_{ik} - n_{ik} - n_s) (j_i - n - j_{sa}^{ik} - 2 \cdot k)!}$$

$$\frac{1}{(n + j_{sa}^s - j_s - s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D + n + 1 \wedge$$

$$1 \leq j_s \leq j_{sa} + 1 \wedge$$

$$j_s + 1 \leq j_i =$$

$$l_{ik} - j_{sa}^{ik} + j_{sa}^s = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$l_s < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge I = k = 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}^i\} \wedge$$

$$s \geq 2 \wedge s = s \Rightarrow$$

$$fz_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(j_i-s+1)} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{ik}+s-k-j_{sa}^{ik}+1} \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j_i=l_{ik}+s-k-j_{sa}^{ik}+2}^{l_{sa}+s-k-j_{sa}+1} \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

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$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{l_i} \sum_{(j_s=1)}^{l_{sa}+s-i-l-j_{sa}+1} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}$$

$$\frac{(n_s - n_s - 1)!}{(i - 2)! \cdot (n_s - j_i + 1)!} \cdot$$

$$\frac{(n_s - n - 1)!}{(n - j_i)!} \cdot$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

$$\sum_{k=1}^{D+l_s+n-l_i} \sum_{(j_s=j_i-s+1)}^{l_{ik}+s-k-j_{sa}^{ik}+1} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-k)}$$

$$\frac{(3 \cdot n_{is} + j_s + j_{sa}^s - n_{ik} - n_s - j_i - j_{sa}^{ik} - s - 2 \cdot k)!}{(3 \cdot n_{is} + 2 \cdot j_s - n_{ik} - n_s - j_i - n - j_{sa}^{ik} - 2 \cdot k)!} \cdot$$

$$\frac{1}{(n + j_{sa}^s - j_s - s)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge I = \mathbb{K} = 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}^i\} \wedge$$

$$s \geq 2 \wedge s = s \Rightarrow$$

$$f_{z^j}^{QSD} = \sum_{k=1}^{i-l} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{+n-D-j_{sa}} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{sa}+s-k-j_{sa}+1} \sum_{n_i=n}^{(n_i-j_s+1)} \sum_{(n_{is}=n-j_s+1)}^{n_{is}+j_s-j_i} \sum_{n_s=n-j_i+1}^{(n_i-j_s+1)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\begin{aligned}
& \sum_{k=1}^{i^{l-1}} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_{ik-k-j_{sa}^k}+2)} \sum_{j_i=j_s+1}^{l_{sa+s-k-j_{sa}+1}} \\
& \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i}^{n_{is}+j_s-j_i} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - l_i - k + 1)!}{(l_s - l_i - s - 2)!} \cdot \\
& \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_s - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=i^l}^{()} \sum_{(j_s=1)}^{l_{sa+s-i^l-j_{sa}+1}} \sum_{j_i=l_{sa}+n+s-D-j_{sa}} \\
& \sum_{n_i=n}^n \sum_{(n_s=n-j_i+1)}^{(n_i-j_i+1)} \\
& \frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -
\end{aligned}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j_i=j_s+s-1} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_{sa}^s-k)} \frac{(3 \cdot n_{is} + j_s + j_{sa}^s - n_{ik} - n_s - j_i - j_s - s - 2 \cdot lk)!}{(3 \cdot n_{is} + 2 \cdot j_s - n_{ik} - n_s - j_i - j_s - s - n - j_{sa}^{ik} - 2 \cdot lk)!} \cdot \frac{1}{(n + j_s - j_s - s)!} \cdot \frac{(l_s - k - j_s + k + 1)! \cdot (j_s - 2)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + j_s > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + j_s > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} = 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}^i\} \wedge$$

$$s \geq 2 \wedge s = s \Rightarrow$$

$$fz_{j_s, j_i}^{SDOSD} = \sum_{k=1}^{i^{l-1}(j_i-s+1)} \sum_{j_s=2}^{l_s+s-k-j_{sa}+1} \sum_{j_i=l_{sa}+n+s-k+1}^{n} \sum_{n_i=n-j_s+1}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(l_s - n_s - 1)!}{(l_s - j_s - k + 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{i^{l-1}(l_s-k+1)} \sum_{j_s=2}^{l_{sa}+s-k-j_{sa}+1} \sum_{j_i=l_{sa}+s-k+1}^{n} \sum_{n_i=n-j_s+1}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} + \frac{(l_i)!}{(D + j_i - n - l_i)! \cdot (j_i)!} \cdot \frac{(n_i - n_s - 1)!}{(D - 2)! \cdot (n_i - n_s - j_i + 1)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_i-s+1)}^{()} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_s+s-k} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-k)}^{()}$$

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$$\frac{(3 \cdot n_{is} + j_s + j_{sa}^s - n_{ik} - n_s - j_i - j_{sa}^{ik} - s - 2 \cdot \mathbb{k})!}{(3 \cdot n_{is} + 2 \cdot j_s - n_{ik} - n_s - j_i - n - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}$$

$$\frac{1}{(n + j_{sa}^s - j_s - s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!}$$

$$\frac{(D - k)!}{(D + j_i - n - l_i) \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \wedge$$

$$(D \geq n < n \wedge l_s = \mathbb{k} = 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^l - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}^l\} \wedge$$

$$s \geq 2 \wedge s = s \Rightarrow$$

$$\begin{aligned}
f_z S_{j_s, j_i}^{DOSD} &= \sum_{k=1}^{i^{l-1} (l_{sa} + n - D - j_{sa})} \sum_{(j_s=2)}^{l_{sa} + s - k - j_{sa} + 1} \sum_{j_i = l_{sa} + n + s - D - j_{sa}} \\
&\sum_{n_i = n}^n \sum_{(n_{is} = n - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_s = n - j_i}^{n_{is} + j_s - j_i} \\
&\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
&\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
&\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
&\frac{(l_s - j_s - k + 1)!}{(l_s - j_s - 2)!} \cdot \\
&\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
&\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!} + \\
&\sum_{k=1}^{i^{l-1} (l_s - k - 1)} \sum_{(j_s = l_{sa} + n - D - j_{sa} + 1)}^{l_{sa} + s - k - j_{sa} + 1} \sum_{j_i = j_s + s - 1} \\
&\sum_{n_i = n}^n \sum_{(n_{is} = n - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_s = n - j_i + 1}^{n_{is} + j_s - j_i} \\
&\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
&\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
&\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
&\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
&\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot
\end{aligned}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{l_i} \sum_{(j_s=1)}^{()} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{sa}+s-i-l-j_{sa}+1}$$

$$\sum_{n_i=n}^n \sum_{(n_i=n-j_i+1)}^{(n_i-j_i+1)}$$

$$\frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - j_i + 1)!} \cdot$$

$$\frac{(n_i - 1)!}{(n_i + j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_i - j_s - 1)!}{(l_i - j_s + 1)! \cdot (j_i - s)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

$$\sum_{k=1}^{D+j_i-s-n-l_i} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{s-k-1} \sum_{j_i=j_s+s-1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_i=n+k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{()} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^{ik})}^{()}$$

$$\frac{(3 \cdot n_{is} + j_s + j_{sa}^s - n_{ik} - n_s - j_i - j_{sa}^{ik} - s - 2 \cdot k)!}{(3 \cdot n_{is} + 2 \cdot j_s - n_{ik} - n_s - j_i - n - j_{sa}^{ik} - 2 \cdot k)!} \cdot$$

$$\frac{1}{(n + j_{sa}^s - j_s - s)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa}^s = j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, k, j_{sa}^i\} \wedge$$

$$s = 2 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$f_z^{DOSD} S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik})}^{(j_i-s+1)} \sum_{(l_{ik}+s-k-j_{sa}^{ik})}^{(l_{ik}+s-k-j_{sa}^{ik})} \sum_{(n_i+n+k)}^{(n_i+n+k)} \sum_{(n_{is}+j_s-j_i-k)}^{(n_{is}+j_s-j_i-k)} \sum_{(n_s=n-j_i+1)}^{(n_s=n-j_i+1)}$$

$$\frac{(n_i - n_{is} - 1)!}{(i - l_{ik} - 1)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{D-n+1} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik})}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{(j_i=l_{ik}+s-k-j_{sa}^{ik}+2)}^{(l_i-k+1)}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{(n_{is}+j_s-j_i-k)}$$

$$\begin{aligned}
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_i - l_s - 1)!}{(j_s + l_i - j_i - 1)! \cdot (j_i - j_s + 1)!} \cdot \\
& \frac{(n - l_i)!}{(n - l_i - 1)! \cdot (n - j_i)!} \cdot \\
& \sum_{k=1}^{l_s + s - n - j_s + 1} \sum_{j_s = j_i - k}^{(j_s = j_i - k)} \sum_{j_i = l_i + n - D}^{j_{sa}^{ik} + 1} \\
& \sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s + 1)}^{(n_i - j_s + 1)} \\
& \sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik}}^{(n_s = n_{ik} + j_s + j_{sa}^{ik} - j_i - j_{sa}^s - k)} \\
& \frac{(3 \cdot n_{is} + j_s + j_{sa}^s - n_{ik} - n_s - j_i - j_{sa}^{ik} - s - 2 \cdot k)!}{(3 \cdot n_{is} + 2 \cdot j_s - n_{ik} - n_s - j_i - n - j_{sa}^{ik} - 2 \cdot k)!} \cdot \\
& \frac{1}{(n + j_{sa}^s - j_s - s)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
\end{aligned}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa}^s = j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s = 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z^{SDOSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{ik}+n-j_s+1)}^{(l_i+n-D-s)} \sum_{j_i=l_{ik}+1}^{l_i-k+1} \sum_{n_i=n+lk-j_s+1}^{n-j_s+1} \sum_{n_s=n-j_i+1}^{n_i-j_i-lk} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} + j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(j_i + j_s - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{D-n+1} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j_i=j_s+s-1}^{l_i-k+1} \sum_{n_i=n+lk}^{n-j_s+1} \sum_{(n_{is}=n+lk-j_s+1)}^{n_i+j_s-j_i-lk} \sum_{n_s=n-j_i+1} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

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$$\begin{aligned}
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+1, \dots, D-s+1)}^{(l_{ik}-l_s+1, \dots, l_{ik}+2)} \sum_{j_i=j_s+1}^{n} \sum_{n_i=n+k}^{(n_i-j_s+1)} \sum_{(n_{is}=n+k, \dots, n_{is}-j_s+1)}^{(n_{is}-j_s+1)} \sum_{(n_{is}=n+k, \dots, n_{is}-j_s+1)}^{(n_{is}-j_s+1)} \sum_{(n_{is}=n+k, \dots, n_{is}-j_s+1)}^{(n_{is}-j_s+1)} \\
& \frac{(3 \cdot n_{is} + 2 \cdot j_{sa}^s - n_{ik} - n_s - j_i - n - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(3 \cdot n_{is} + 2 \cdot j_{sa}^s - n_{ik} - n_s - j_i - n - j_{sa}^{ik} - 2 \cdot \mathbb{k})!} \cdot \\
& \frac{1}{(n + j_{sa}^s - j_s - s)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
\end{aligned}$$

$$D \geq n < n \wedge l_s = D - n + 1 \wedge$$

$$2 \leq j_s \leq j_s - s + 1 \wedge$$

$$j_i + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa}^s = j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s = 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$fz_{j_s, j_i}^{DOSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(j_i-s+1)} \sum_{j_i=l_{ik}+n+s-D-j_s^{ik}}^{l_s+s-k}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_s - l_s + 1)!}{(j_s + j_i - l_s - 1)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)} \sum_{j_i=l_s+s-k+1}^{l_{ik}+s-k-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

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$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_i-s+1)}^{(\)} \sum_{j_i=l_{ik}+n+s-D-j_{sa}^{i,k}}$$

$$\sum_{n_i=n_{i-1}+j_{sa}^{i-1,k}}^n \sum_{n_{i-1}=n_{i-2}+j_{sa}^{i-2,k}}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{is,k}} \sum_{n_{ik}+j_{sa}^{i,k}-j_i-j_{sa}^{i,k}}^{(\)}$$

$$\frac{(3 \cdot n_{i-1} + j_s + j_{sa}^{i-1,k} - n_{ik} - n_{i-1} - j_i - j_{sa}^{i-1,k} - 2 \cdot \mathbb{k})!}{(3 \cdot n_{is} + 2 \cdot j_s - n_{i-1} - n_s - j_{sa}^{i-1,k} - n - j_{sa}^{i,k} - 2 \cdot \mathbb{k})!}$$

$$\frac{1}{(n + j_{sa}^s - j_s - s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D > n < n \wedge I = \mathbb{k} \geq 0 \wedge I = \mathbb{k} \geq 1 \wedge$$

$$2 \leq i_c \leq j_i - s + 1 \wedge$$

$$j_c + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{i,k} + 1 \leq l_c \wedge l_{ik} - j_{sa}^{i,k} - s = l_{ik} \wedge$$

$$D > n < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa}^s = j_{sa}^i \wedge$$

$$s: \{j_{sa}^i, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s = 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned}
 f_{zS}^{DOSD}_{j_s, j_i} &= \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_{ik}+n-D-j_{s\bar{a}}^{ik})} \sum_{j_i=l_{ik}+n+s-D-j_{s\bar{a}}^{ik}}^{l_{ik}+s-k-j_{s\bar{a}}^{ik}+1} \\
 &\quad \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i-k}^{n_{is}+j_s-j_i-k} \\
 &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 &\quad \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 &\quad \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 &\quad \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 &\quad \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 &\quad \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!} + \\
 &\quad \sum_{k=1}^{n+1} \sum_{(j_s=l_{ik}+n-D-j_{s\bar{a}}^{ik}+1)}^{(l_s-k+1)} \sum_{j_i=j_s+s-1}^{l_{ik}+s-k-j_{s\bar{a}}^{ik}+1} \\
 &\quad \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k} \\
 &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 &\quad \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 &\quad \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 &\quad \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 &\quad \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot
 \end{aligned}$$

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$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_s-k+1)} \sum_{j_i=j_s+s-1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_i+k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{ik}+j_s+j_{sa}^{ik}-j_i-k)}$$

$$\frac{(3 \cdot n_{is} + j_s + j_{sa}^s - n_{ik} - n_s - j_i - j_{sa}^{ik} - s - 2 \cdot k)}{(3 \cdot n_{is} + 2 \cdot j_s - n_{ik} - n_s - j_{sa}^{ik} - 2 \cdot k)!}$$

$$\frac{(n + j_{sa}^s - j_s - s)!}{(l_s - k - 1)!}$$

$$\frac{(l_s - k - 1)!}{(j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik}) \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa}^s = j_{sa}^l - 1 \wedge$$

$$s: \{j_{sa}^s, k, j_{sa}^l\} \wedge$$

$$s = 2 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$fz S_{j_s j_i}^{DOSD} = \sum_{k=1}^{D-n+1} \sum_{j_s=l_s+n-D}^{(j_s+s+1)} \sum_{j_i=l_i+n-D}^{s-k} \frac{(n_i - j_s + 1) \dots (n_{is} + j_s - j_i - k)}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)! \dots (j_s - n_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{D-n+1} \sum_{j_s=l_s+n-D}^{(l_s-k+1)} \sum_{j_i=l_s+s-k+1}^{l_i-k+1} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

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$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 1)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{l_i!}{(D + j_i - n - l_i)! \cdot (j_i)!} \cdot \sum_{n_i=n+1}^{D+l_s+s-n-l_i} \sum_{n_{is}=n+l_k-j_s+1}^{l_s+s-n} \sum_{n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^{ik}}^{l_s+s-n} \sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}}^{(n_{is}+j_s+1)} \frac{(n_{is} + j_s + j_{sa}^{ik} - n_{ik} - n_s - j_i - j_{sa}^{ik} - s - 2 \cdot l_k)!}{(3 + 2 \cdot l_k - n_{ik} - n_s - j_i - n - j_{sa}^{ik} - 2 \cdot l_k)!} \cdot \frac{1}{(n + j_{sa}^s - j_s - s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n) \wedge l_s > D - n + 1 \wedge j_s + s - 1 \leq j_i \leq n \wedge l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik}) \vee (D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik})) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa}^s = j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s = 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$fz S_{j_s}^{SD} = \sum_{k=1}^{D-n} \sum_{j_s=l_s+n-D}^{(l_i+n-D-s)} \sum_{j_i=l_i+n-D}^{l_i-k+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

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$$\sum_{k=1}^{D-n+1} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)} \sum_{j_i=j_s+s-1}^{l_i-k+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - j_s - k + 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - l_s)! \cdot (l_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D - l_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)} \sum_{j_i=j_s+s-1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^{ik})}^{()}$$

$$\frac{(3 \cdot n_{is} + j_s + j_{sa}^s - n_{ik} - n_s - j_i - j_{sa}^{ik} - s - 2 \cdot k)!}{(3 \cdot n_{is} + 2 \cdot j_s - n_{ik} - n_s - j_i - n - j_{sa}^{ik} - 2 \cdot k)!}$$

$$\frac{1}{(n + j_{sa}^s - j_s - s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa}^s = j_{sa}^l - 1 \wedge$$

$$s: \{j_{sa}^s, k, j_{sa}^l\} \wedge$$

$$s = 2 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$fz^{SDG}_{j_s, j_i} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(j_i-s+1)} \sum_{j_i=l_i+n-D}^{l_{sa}+s-k-j_{sa}+1} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{(n_{is}+j_s-j_i-k)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{D-n+1} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_{sa}-k-j_{sa}+2)} \sum_{j_i=l_{sa}+s-k-j_{sa}+2}^{l_i-k+1}$$

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$$\begin{aligned}
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_s - s - 1)!}{(j_s + l_i - n - l_s - j_i - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{i=1}^{D+l_s+s-n-l_i} \sum_{s=j_i-s+1}^{()} \sum_{j_i=l_i+n-D}^{l_{sa}+s-k-j_{sa}+1} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^{ik})}^{()} \\
 & \frac{(3 \cdot n_{is} + j_s + j_{sa}^s - n_{ik} - n_s - j_i - j_{sa}^{ik} - s - 2 \cdot \mathbb{k})!}{(3 \cdot n_{is} + 2 \cdot j_s - n_{ik} - n_s - j_i - n - j_{sa}^{ik} - 2 \cdot \mathbb{k})!} \cdot \\
 & \frac{1}{(n + j_{sa}^s - j_s - s)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

$((D \geq n < n \wedge l_s > D - n + 1 \wedge$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa}^s = j_{sa}^l - 1 \wedge$$

$$s: \{j_{sa}^s, k, j_{sa}^l\} \wedge$$

$$s = 2 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$\begin{aligned}
 & \sum_{j_s=j_i}^{D-n+1} \sum_{j_i=j_i}^{D-s} \sum_{j_i=l_i+n-D}^{l_i-k+1} \\
 & \sum_{n_i=n+k}^n \sum_{n_i=n+k-j_s+1}^{(n_i-j_s)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{D-n+1} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{sa}-k-j_{sa}+2)} \sum_{j_i=j_s+s-1}^{l_i-k+1}
 \end{aligned}$$

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$$\begin{aligned}
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_s - s - 1)!}{(j_s + l_i - n - l_s - j_i - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{i=1}^{D+l_s+s-n-l_i} \sum_{k=l_i+n-D-s+1}^{j_{sa}-k-j_{sa}+2} \sum_{j_i=j_s+s-1}^{j_i} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^{ik})}^{()} \\
 & \frac{(3 \cdot n_{is} + j_s + j_{sa}^s - n_{ik} - n_s - j_i - j_{sa}^{ik} - s - 2 \cdot \mathbb{k})!}{(3 \cdot n_{is} + 2 \cdot j_s - n_{ik} - n_s - j_i - n - j_{sa}^{ik} - 2 \cdot \mathbb{k})!} \cdot \\
 & \frac{1}{(n + j_{sa}^s - j_s - s)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge I = k \geq 0 \wedge$$

$$j_{sa}^s = j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, k, j_{sa}^i\} \wedge$$

$$s = 2 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$f_z^{SDOSD} = \sum_{k=1}^{D-n+1} \sum_{j_s=l_{ik}+n-D-j_{sa}^{ik}+1}^{(j_i-s+1)} \sum_{j_i=l_{ik}+s-k-j_{sa}^{ik}+1}^{(j_i-s+1)} \sum_{n_i=n+k}^n \sum_{n_{is}=n+k-j_s+1}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k} \frac{(n_i - n_{is} - 1)!}{(i - l_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{D-n+1} \sum_{j_s=l_{ik}+n-D-j_{sa}^{ik}+1}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j_i=l_{ik}+s-k-j_{sa}^{ik}+2}^{l_{sa}+s-k-j_{sa}+1} \sum_{n_i=n+k}^n \sum_{n_{is}=n+k-j_s+1}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i - 1)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - 1)!}{(j_s + l_i - j_i - 1)! \cdot (j_i - j_s - 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{k=1}^{D+l_i-n-l_i} \sum_{j_i=s+1}^{j_i-1} \sum_{n_{is}=l_{sa}+n+s-D-j_{sa}}^{n_{is}^{ik}+1} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{k=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-k)} \frac{(3 \cdot n_{is} + j_s + j_{sa}^s - n_{ik} - n_s - j_i - j_{sa}^{ik} - s - 2 \cdot k)!}{(3 \cdot n_{is} + 2 \cdot j_s - n_{ik} - n_s - j_i - n - j_{sa}^{ik} - 2 \cdot k)!} \cdot \frac{1}{(n + j_{sa}^s - j_s - s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq j_s \leq j_i - s + 1 \wedge$

$j_s + s - 1 \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$$D \geq n < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa}^s = j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s = 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_{sa}+n-D-j_{sa})} \sum_{(j_i=l_{sa}+n-D-j_{sa})}^{(l_{sa}+s-k-j_{sa}+1)} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{(n_i-j_i-\mathbb{k})} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} + j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j_i=j_s+s-1}^{(l_{sa}+s-k-j_{sa}+1)} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{(n_{is}+j_s-j_i-\mathbb{k})} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

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$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s - 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{j_s=l_{sa}+n-l_i-k}^{(l_{ik}-k-l_i)} \sum_{j_i=j_s+1}^{n-l_i} \sum_{n_i=n+l_k}^n \sum_{n_{is}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{ik}+j_{sa}^{ik}-j_i-j_{sa}^s-l_k}^{(n_i-j_s+1)} \frac{(3 \cdot n_{is} + j_{sa}^s - j_{sa}^{ik} - j_i - j_{sa}^{ik} - s - 2 \cdot l_k)!}{(3 \cdot n_{is} + 2 \cdot n_{ik} - n_s - j_i - n - j_{sa}^{ik} - 2 \cdot l_k)!} \cdot \frac{1}{(n + j_{sa}^s - j_s - s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$((D > n < n) \wedge (l_s - n + 1 \wedge$

$2 \leq j_s \leq j_i - s + 1 \wedge$

$j_s + s - 1 \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$

$(D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq j_s \leq j_i - s + 1 \wedge$

$j_s + s - 1 \leq j_i \leq n \wedge$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa}^s = j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s = 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_{z, j_i}^{DOSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(j_i-k)} \sum_{l_s+s-k}^{l_s+s-k} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{(n_{is}+j_s-j_i-\mathbb{k})}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)} \sum_{j_i=l_s+s-k+1}^{l_{sa}+s-k-j_{sa}+1}$$

$$\begin{aligned}
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_s - s - 1)!}{(j_s + l_i - n - l_s - s + 1)! \cdot (i_s - n - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=0}^{l_s+s-n-l_i} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_s+s-k} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}}^{(\cdot)} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^{ik})}^{(\cdot)} \\
 & \frac{(3 \cdot n_{is} + j_s + j_{sa}^s - n_{ik} - n_s - j_i - j_{sa}^{ik} - s - 2 \cdot \mathbb{k})!}{(3 \cdot n_{is} + 2 \cdot j_s - n_{ik} - n_s - j_i - n - j_{sa}^{ik} - 2 \cdot \mathbb{k})!} \cdot \\
 & \frac{1}{(n + j_{sa}^s - j_s - s)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

$((D \geq n < n \wedge l_s > D - n + 1 \wedge$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa}^s = j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, k, j_{sa}^i\} \wedge$$

$$s = 2 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$\begin{aligned} \sum_{j_s, j_i}^{DOSD} &= \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_{sa}+n-D-j_{sa})} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{sa}+s-k-j_{sa}+1} \\ &\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k} \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ &\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\ &\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \end{aligned}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D-n+1} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_s-k-1)} \sum_{j_i=j_s+s-1}^{l_{sa}+s-k-j_{sa}+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+l_k}^{j_i-l_k}$$

$$\frac{(n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - j_s + 1)!}$$

$$\frac{(n_{is} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n - j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_s-k-1)} \sum_{j_i=j_s+s-1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-l_k)}$$

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$$\frac{(3 \cdot n_{is} + j_s + j_{sa}^s - n_{ik} - n_s - j_i - j_{sa}^{ik} - s - 2 \cdot \mathbb{k})!}{(3 \cdot n_{is} + 2 \cdot j_s - n_{ik} - n_s - j_i - \mathbf{n} - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!}$$

$$\frac{(D - \mathbb{k})!}{(D + j_i - \mathbf{n} - l_i)!(\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$l_i \leq D + s - \mathbf{n} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa}^s = j_{sa}^i - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s = 2 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$fz S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(j_i-s+1)} \sum_{j_i=s+1}^{l_{ik}+s-k-j_{sa}^{ik}+1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^{\mathbf{n}} \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}$$

$$\begin{aligned}
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{i l - 1} \sum_{(j_s=2)}^{(l_{ik} - k - j_{sa}^{ik} + 2)} \sum_{i=l_{ik}+s-1}^{l_{ik}+1} \sum_{j_{sa}^{ik}+2}^{j_{sa}^{ik}+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-1)}^{(n_{is}=n+l_k)} \sum_{n_s=n-j_i+1}^{n_s=n-j_i} \\
 & \frac{(n_i - n_s - 1)!}{(j_s - 1)! \cdot (n_i - n_s - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=i}^l \sum_{(j_s=1)}^{l_i - i + 1} \sum_{j_i=s}^{l_i - i + 1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_s=n-j_i+1)}^{(n_i - j_i - l_k + 1)} \\
 & \frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot
 \end{aligned}$$

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$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$\sum_{k=1}^{i^l-1} \sum_{(j_s=j_i-s+1)}^{()} \sum_{j_i=s+1}^{l_{ik}+s-k-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+1}^n \sum_{(n+j_s+1)}^{(n+j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}+j_s+1}^{()} \sum_{(n_{ik}+j_s+1-j_i-j_{sa}^{ik})}$$

$$\frac{(3 \cdot n_{ik} + j_s + j_{sa}^{ik} - n_{ik} - n_s - j_i - j_{sa}^{ik} - 2 \cdot k)!}{(3 \cdot n_{is} + 2 \cdot j_s - n_{ik} - n_s - j_i - j_{sa}^{ik} - 2 \cdot k)!}$$

$$\frac{1}{(n + j_{sa}^s - j_s - s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=i^l}^{()} \sum_{(j_s=1)}^{()} \sum_{j_i=s}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{ik}=n_i-j_s-j_{sa}^{ik})}^{()} \sum_{n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^{ik}}$$

$$\frac{(3 \cdot n_i - n_{ik} - n_s - j_s - j_{ik} - j_i - s - 2 \cdot k + 3)!}{(3 \cdot n_i - n_{ik} - n_s - j_{ik} - j_i - n - 2 \cdot k + 2)! \cdot (n - s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l_i \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

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$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa}^s = j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, k, j_{sa}^i\} \wedge$$

$$s = 2 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$fz_{j_s, j_i}^{SDOSD} = \sum_{k=1}^{l-1} \sum_{j_i=j_s+s-1}^{n-k-j_{sa}^{ik}+1} \sum_{n_i=n+k}^n \sum_{n_s=n-j_i+1}^{n_i-j_i-k} \frac{(n_i - n_s - 1)!}{(j_s - k)! \cdot (n_i - n_s - j_s + 1)!} \cdot \frac{(n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_s + j_s - n_s - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{l-1} \sum_{j_s=1}^{l-1} \sum_{j_i=s}^{l-1} \frac{\binom{l_i - i}{k}}{l^{i-1}}$$

$$\sum_{n_i=n+k}^n \sum_{n_s=n-j_i+1}^{n_i-j_i-k} \frac{\binom{n_i - j_i - k + 1}{n_s - n - j_i + 1}}{1}$$

$$\frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - j_s - 1)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$\sum_{k=1}^{l-1} \sum_{j_i=j_s+1}^{n} \sum_{j_s=j_s+1}^{n} \dots$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-\mathbb{k}}^{n_i-j_s+1} \dots$$

$$\sum_{n_i=n+\mathbb{k}} \sum_{n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-\mathbb{k}} \dots$$

$$\frac{(3 \cdot n_{is} + j_{sa}^s - n_{ik} - n_s - j_i - j_{sa}^{ik} - s - 2 \cdot \mathbb{k})!}{(3 \cdot n_{is} + 2 \cdot \mathbb{k} - n_{ik} - n_s - j_i - n - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}$$

$$\frac{1}{(n + j_{sa}^s - j_s - s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{l-1} \sum_{j_s=1}^{l-1} \sum_{j_i=s}^{l-1} \dots$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-\mathbb{k}}^{n_i-j_s+1} \dots$$

$$\frac{(3 \cdot n_i - n_{ik} - n_s - j_s - j_{ik} - j_i - s - 2 \cdot \mathbb{k} + 3)!}{(3 \cdot n_i - n_{ik} - n_s - j_{ik} - j_i - n - 2 \cdot \mathbb{k} + 2)! \cdot (n - s)!}$$

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$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa}^s = j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s = 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned} j_{sa}^{DOSD} = & \sum_{j_i=1}^{n-1} \sum_{(j_s=2)}^{(j_i-s+1)} \sum_{j_i=l_i+n-D}^{l_{ik}+s-k-j_{sa}^{ik}+1} \\ & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}} \\ & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ & \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\ & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\ & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\ & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\ & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \end{aligned}$$

$$\begin{aligned}
 & \sum_{k=1}^{i^{l-1} (l_{ik-k-j_{sa}^{ik}+2)} } \sum_{(j_s=2)}^{l_i-k+1} \sum_{j_i=l_{ik+s-k-j_{sa}^{ik}+2}}^{l_i-k+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i}^{n_{is}+j_s-j_i-l_k} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l_i - k + 1)!}{(l_s - l_i - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_s - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^i \sum_{(j_s=1)}^{()} \sum_{j_i=l_i+n-D}^{l_i-i^{l+1}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_s=n-j_i+1)}^{(n_i-j_i-l_k+1)} \\
 & \frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -
 \end{aligned}$$

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$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_i-s+1)}^{()} \sum_{j_i=l_i+n-D}^{l_{ik}+s-k-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_i=n+k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_{sa}^s-k)}^{()}$$

$$\frac{(3 \cdot n_{is} + j_s + j_{sa}^s - n_{ik} - n_s - j_i - j_s + 2 \cdot k)!}{(3 \cdot n_{is} + 2 \cdot j_s - n_{ik} - n_s - j_i - n - j_{sa}^{ik} - k)!}$$

$$\frac{1}{(n + j_s - j_s - s)!}$$

$$\frac{(l_s - k)}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_s - j_{sa}^{ik} + j_s - l_s \wedge l_i - j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + j_s - n + 1 \wedge$$

$$D \geq n < n \wedge l = k \geq 1 \wedge$$

$$j_{sa}^s = j_{sa}^i \wedge$$

$$s: \{j_{sa}^{ik}, j_{sa}^i\} \wedge$$

$$s = 2 \wedge s = j_s + k \wedge$$

$$k \geq 1 \Rightarrow$$

$$fz S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i^{l-1}} \sum_{(j_s=2)}^{(l_i+n-D-s)} \sum_{j_i=l_i+n-D}^{l_i-k+1}$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-l_k} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{i=l-1}^{i^l-1} \sum_{j_s=l_i+n-D-s+1}^{k-k-j_s^k+2} \sum_{j_i=j_s+s-1}^{l_i-k+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-l_k} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +
 \end{aligned}$$

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$$\begin{aligned}
& \sum_{k=1}^{\binom{()}{l}} \sum_{(j_s=1)}^{l_i - l + 1} \sum_{j_i = l_i + n - D}^{n} \\
& \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_s = n - j)}^{(n_i - j_i - \mathbb{k} + 1)} \\
& \frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n_s - 1)! \cdot (n_s - j_i)!} \cdot \\
& \frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s - 1)! \cdot (j_i - s)!} \cdot \\
& \frac{\binom{()}{l}}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{k=1}^{D + l_s + s - 1} \sum_{(j_s = l_i + n - D - s + 1)}^{(l_{ik} - k - j_{ik} + 2)} \sum_{j_i = j_s + s - 1}^n \\
& \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \\
& \sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik}}^{(n_s = n_{ik} + j_s + j_{sa}^{ik} - j_i - j_{sa}^s - \mathbb{k})} \sum_{(n_s = n_{ik} + j_s + j_{sa}^{ik} - j_i - j_{sa}^s - \mathbb{k})}^{\binom{()}{l}} \\
& \frac{(n_{is} + j_s + j_{sa}^s - n_{ik} - n_s - j_i - j_{sa}^{ik} - s - 2 \cdot \mathbb{k})!}{(3 \cdot n_{is} + 2 \cdot j_s - n_{ik} - n_s - j_i - n - j_{sa}^{ik} - 2 \cdot \mathbb{k})!} \cdot \\
& \frac{1}{(n + j_{sa}^s - j_s - s)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
\end{aligned}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge I = k \geq 0 \wedge$$

$$j_{sa}^s = j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, k, j_{sa}^i\} \wedge$$

$$s = 2 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$f_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(j_i-s+1)} \sum_{l_s=s-k}^{l_s+s-k} \sum_{n_i=n+k}^{n_i+j_s+1} \sum_{n_{is}=n+k-j_s+1}^{n_{is}+j_s-j_i-k} \sum_{n_s=n-j_i+1}^{n_s=n-j_i+1} \frac{(n_i - n_{is} - 1)!}{(i - l_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(l_s-k+1)} \sum_{j_i=l_s+s-k+1}^{l_{ik}+s-k-j_{sa}^{ik}+1} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k}$$

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$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - s + 1)! \cdot (j_i - j_s - s + 1)!} \cdot$$

$$\frac{(n - l_i)!}{(n - j_i - n + l_i)! \cdot (n - j_i)!} \cdot$$

$$\sum_{i=1}^n \sum_{j_s=1}^{(n-l_i)} \sum_{j_i=l_{ik}+n+s-D-j_s^{ik}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_s=n-j_i+1)}^{(n_i-j_i-l_k+1)}$$

$$\frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_i-s+1)}^{(n-l_i)} \sum_{j_i=l_{ik}+n+s-D-j_s^{ik}}^{l_s+s-k}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{()} (n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-k)$$

$$\frac{(3 \cdot n_{is} + j_s + j_{sa}^s - n_{ik} - n_s - j_i - j_{sa}^{ik} - s - 2 \cdot k)!}{(3 \cdot n_{is} + 2 \cdot j_s - n_{ik} - n_s - j_i - n - j_{sa}^{ik} - 2 \cdot k)!}$$

$$\frac{1}{(n + j_{sa}^s - j_s - k)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - l_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa}^s = j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}^i\} \wedge$$

$$s = 2 \wedge s = s + 1 \wedge$$

$$k_z: 2 \cdot k - 1 \Rightarrow$$

$$fz_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(l_{ik}+n-D-j_{sa}^{ik})} \sum_{j_i=l_{ik}+n+s-D-j_{sa}^{ik}}^{l_{ik}+s-k-j_{sa}^{ik}+1} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\begin{aligned}
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \\
 & \sum_{k=1}^{i-1} \sum_{j_i=l_{ik}+n-D-j_s+1}^{(l_s-k+1)} \sum_{j_i=j_s+s-1}^{l_i+k+s-1} \sum_{s_a+1}^{i k} \\
 & \sum_{n_i=n+k}^{(n_i-j_s+1)} \sum_{(n_i+k-j_s+1)}^{n_i+j_s-j_i-k} \sum_{n_s=n-j_i+1} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_s - n_s - 1)!}{(j_i - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{i-1} \sum_{j_i=l_{ik}+n+s-D-j_s}^{()} \sum_{j_i=l_{ik}+n+s-D-j_s}^{l_i+k+s-1} \sum_{s_a}^{i k} \\
 & \sum_{n_i=n+k}^n \sum_{(n_s=n-j_i+1)}^{(n_i-j_i-k+1)} \\
 & \frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!}
 \end{aligned}$$

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$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_s-k+1)} \sum_{j_{sa}^{ik}=s-1}^{j_{sa}^{ik}=s-1}$$

$$\sum_{n_i=n}^n \sum_{n_{is}=n+l_k-j_s+1}^{n_{is}=n+l_k-j_s+1}$$

$$\sum_{n_{ik}=n_{is}}^{n_{ik}=n_{is}-j_{sa}^{ik}} \sum_{(n_{sa}^{ik}=j_s+j_{sa}^{ik}-j_i-j_{sa}^{ik})}^{(n_{sa}^{ik}=j_s+j_{sa}^{ik}-j_i-j_{sa}^{ik})}$$

$$\frac{(3 \cdot n_{is} + j_{sa}^s - n_{ik} - j_i - j_{sa}^k - s - 2 \cdot l_k)!}{(3 \cdot n_{is} + 2 \cdot n_{ik} - n_s - j_i - n - j_{sa}^{ik} - 2 \cdot l_k)!}$$

$$\frac{1}{(n + j_{sa}^s - j_s - s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + j_{sa}^{ik} = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$(j_{sa}^{ik} - n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s \leq j_i \leq n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$l_i \leq D + s - n)) \wedge$$

$$D \geq n < n \wedge l_i - s + 1 \geq 0 \wedge$$

$$j_{sa}^s = j_{sa} - \mathbb{k} \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s = z, s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 =$$

$$fz S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(j_i-s+1)} \sum_{j_i=s+1}^{l_s+s-k}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 1)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(l_i)!}{(D + j_i - n - l_i)! \cdot (j_i)!} + \sum_{k=1}^{i-1} \sum_{j_s=1}^{(l_s - k + 1)} \sum_{n_i=n+l_k}^n \sum_{n_s=n+l_k-j_s+1}^{n_{is}+j_s-j_i-k} \frac{(n_i - n_{is} - 1)!}{(i - l)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^i \sum_{j_s=1}^{(l_s - i + 1)} \sum_{j_i=s}^{l_i - i + 1}$$

$$\sum_{n_i=n+l_k}^n \sum_{n_s=n-j_i+1}^{(n_i - j_i - k + 1)}$$

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$$\frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - 1)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$\sum_{k=0}^{i-l} \sum_{j_i=j_i-s+1}^{i-l-k} \binom{i-l-k}{j_i} \binom{i-l-k}{j_i} \binom{i-l-k}{j_i} \binom{i-l-k}{j_i} \binom{i-l-k}{j_i} \binom{i-l-k}{j_i}$$

$$\sum_{n_i=n+l_k}^n \binom{n_i-j_s+1}{n_i-j_s+1} \binom{n_i-j_s+1}{n_i-j_s+1} \binom{n_i-j_s+1}{n_i-j_s+1} \binom{n_i-j_s+1}{n_i-j_s+1} \binom{n_i-j_s+1}{n_i-j_s+1}$$

$$\sum_{n_i=n+l_k}^n \binom{n_i-j_s+1}{n_i-j_s+1} \binom{n_i-j_s+1}{n_i-j_s+1} \binom{n_i-j_s+1}{n_i-j_s+1} \binom{n_i-j_s+1}{n_i-j_s+1} \binom{n_i-j_s+1}{n_i-j_s+1}$$

$$\frac{(3 \cdot n_{is} + j_{sa}^s - n_{ik} - n_s - j_i - j_{sa}^{ik} - s - 2 \cdot k)!}{(3 \cdot n_{is} + 2 \cdot k - n_{ik} - n_s - j_i - n - j_{sa}^{ik} - 2 \cdot k)!}$$

$$\frac{1}{(n + j_{sa}^s - j_s - s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=0}^{i-l} \sum_{j_s=1}^{i-l} \sum_{j_i=s}^{i-l-k}$$

$$\sum_{n_i=n+l_k}^n \binom{n_i-j_s-j_{sa}^{ik}}{n_i-j_s-j_{sa}^{ik}} \binom{n_i-j_s-j_{sa}^{ik}}{n_i-j_s-j_{sa}^{ik}} \binom{n_i-j_s-j_{sa}^{ik}}{n_i-j_s-j_{sa}^{ik}} \binom{n_i-j_s-j_{sa}^{ik}}{n_i-j_s-j_{sa}^{ik}} \binom{n_i-j_s-j_{sa}^{ik}}{n_i-j_s-j_{sa}^{ik}}$$

$$\frac{(3 \cdot n_i - n_{ik} - n_s - j_s - j_{ik} - j_i - s - 2 \cdot k + 3)!}{(3 \cdot n_i - n_{ik} - n_s - j_{ik} - j_i - n - 2 \cdot k + 2)! \cdot (n - s)!}$$

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$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$((D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s$$

$$(l_i \leq D + s - n) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa}^s = j_{sa}^l - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}^l\} \wedge$$

$$s = 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned}
 f_{j_s, j_i}^{S_{DOSD}} &= \sum_{k=1}^{l_i-1} \sum_{(j_s=2)}^{(l_s-k+1)} \sum_{j_i=j_s+s-1}^{l_i-k+1} \\
 &\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i}^{n_{is}+j_s-j_i-k} \\
 &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 &\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} - n_s - j_i)!} \cdot \\
 &\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 &\frac{(l_s - l_i - k + 1)!}{(l_s - l_i - s - 2)!} \cdot \\
 &\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 &\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!} + \\
 &\sum_{k=1}^{()} \sum_{(j_s=1)}^{l_i - i^{l+1}} \sum_{j_i=s} \\
 &\sum_{n_i=n+k}^n \sum_{(n_s=n-j_i+1)}^{(n_i-j_i-k+1)} \\
 &\frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!} \cdot \\
 &\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 &\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!} \cdot \\
 &\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!} -
 \end{aligned}$$

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$$\begin{aligned}
 & \sum_{k=1}^{i^{l-1} (l_s-k+1)} \sum_{(j_s=2)} \sum_{j_i=j_s+s-1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s-2)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{i_s}+j_{sa}^s-j_{sa}^{ik} (n_s=n_{ik}+j_s+j_{sa}^{ik}-j_{sa}^s-k)}^{(\quad)} \\
 & \frac{(3 \cdot n_{i_s} + j_s + j_{sa}^s - n_{ik} - n_s - j_i - j_{ik} - j_i - s - 2 \cdot l_k)!}{(3 \cdot n_{i_s} + 2 \cdot j_s - n_{ik} - n_s - j_i - j_{ik} - j_i - s - 2 \cdot l_k)!} \\
 & \frac{1}{(n + j_s - j_s - s)!} \\
 & \frac{(l_s - k - j_s - k + 1)! \cdot (j_s - 2)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \\
 & \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - j_i)!} \\
 & \sum_{k=i^l}^{(\quad)} \sum_{(j_s=1)} \sum_{j_i=s} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n_i-j_s-j_{sa}^{ik})}^{(\quad)} \sum_{n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-k} \\
 & \frac{(n_i - n_{ik} - n_s - j_s - j_{ik} - j_i - s - 2 \cdot l_k + 3)!}{(3 \cdot n_i - n_{ik} - n_s - j_{ik} - j_i - n - 2 \cdot l_k + 2)! \cdot (n - s)!} \\
 & \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}
 \end{aligned}$$

$$((D \geq n < l_i \wedge l_s \leq D - n + 1 \wedge$$

$$l_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \wedge$$

$$D \geq n < n \wedge l_i - s + 1 \geq 0 \wedge$$

$$j_{sa}^s = j_{sa} - \mathbb{k} \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s = z, s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 =$$

$$fz S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(j_i-s+1)} \sum_{j_i=l_i+n-D}^{l_s+s-k}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(l_i)!}{(D + j_i - n - l_i)! \cdot (j_i)!} + \sum_{k=1}^{i-1} \sum_{j_s=0}^{(l_s - k + 1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k} \frac{(n_i - n_{is} - 1)!}{(i - l_i - k)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{i-1} \sum_{j_s=1}^{()} \sum_{j_i=l_i+n-D}^{l_i - i + 1} \sum_{n_i=n+k}^n \sum_{n_s=n-k-j_s+1}^{(n_i - j_i - k + 1)} (n_s = n - j_i + 1)$$

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$$\frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - l_s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{j_i=s+1}^{n-l_i-k}$$

$$\sum_{n_i=n+k}^n \sum_{j_s=j_i+1}^{(n_i-j_s+1)}$$

$$\sum_{n_i=n+k}^n \sum_{j_s=j_i+1}^{(n_i-j_s+1)}$$

$$\frac{(3 \cdot n_{is} + j_{sa}^{ik} - j_{sa}^{ik} - j_i - j_{sa}^{ik} - s - 2 \cdot ik)!}{(3 \cdot n_{is} + j_{sa}^{ik} - n_{ik} - n_s - j_i - n - j_{sa}^{ik} - 2 \cdot ik)!}$$

$$\frac{1}{(n + j_{sa}^s - j_s - s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_i \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_i + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa}^s = j_{sa}^l - 1 \wedge$$

$$s: \{j_{sa}^s, k, j_{sa}^l\} \wedge$$

$$s = 2 \wedge s = k + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i^{l-1} (l_i + n - D - s)} \sum_{(j_s=2)}^{l_i - k + 1} \sum_{j_i = l_i + n - D}^{l_i - k + 1}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_s = n - j_i + 1}^{n_{is} + j_s - j_i - k}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\begin{aligned}
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{i-1} \sum_{j_s=l_i+1}^{l_i+D-s+1} \sum_{j_i=j_s+k}^{l_i+k+1} \frac{(n_i - j_s + 1)! \cdot (n_{is} + j_s - j_i - k)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_s - n_s - 1)!}{(j_i - 2)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{i-1} \sum_{j_s=1}^{l_i-i+1} \sum_{j_i=l_i+n-D}^{l_i-i+1} \frac{(n_i - j_i - k + 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!} \cdot
 \end{aligned}$$

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$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)} \sum_{j_{s+1}^{s+1}}$$

$$\sum_{n_i=n}^n \sum_{(n_{is}=n+k-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}^{s-1} - j_{sa}^{ik} (n_{is}^{s-1} + j_s + j_{sa}^{ik} - j_i - j_{sa}^s - k)}$$

$$\frac{(3 \cdot n_{is} + j_{sa}^s - n_{ik} - j_i - j_{sa}^k - s - 2 \cdot k)!}{(3 \cdot n_{is} + 2 \cdot n_{ik} - n_{ik} - n_s) (j_i - n - j_{sa}^{ik} - 2 \cdot k)!}$$

$$\frac{1}{(n + j_{sa}^s - j_s - s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D + n + 1 \wedge$$

$$1 \leq j_s \leq j_{s+1} \wedge$$

$$j_s + 1 \leq j_i \wedge$$

$$l_{ik} - j_{sa}^{ik} + j_{sa}^s = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_s < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge I = k \geq 0 \wedge$$

$$j_{sa}^s = j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, k, j_{sa}^i\} \wedge$$

$$s = 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z^{DOSD} S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(j_i-s+1)} \sum_{j_i=l_i+n-D}^{l_{sa}+s-k-j_{sa}+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s + j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_s - l_s - s + 1)!}{(j_s + l_s - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(l_{sa}-k-j_{sa}+2)} \sum_{j_i=l_{sa}+s-k-j_{sa}+2}^{l_i-k+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i - 1)!} +$$

$$\sum_{k=1}^{()} \sum_{(j_s=1)}^{l_i - i + 1} \sum_{j_i = i + n - D}^{n - D}$$

$$\sum_{n_i = n + k}^n \sum_{(n_s = n - j_i + 1)}^{(n_i - j_s + 1)}$$

$$\frac{(n_i - n_s)!}{(j_i - 1)! \cdot (n_i - n_s - j_i + 1)!}$$

$$\frac{(n_s - j_i - n - 1)!}{(n_s - j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_i - l_s + 1)! \cdot (j_i - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_i-s+1)}^{()} \sum_{j_i=l_i+n-D}^{l_{sa}+s-k-j_{sa}+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-k)}^{()}$$

$$\frac{(3 \cdot n_{is} + j_s + j_{sa}^s - n_{ik} - n_s - j_i - j_{sa}^{ik} - s - 2 \cdot k)!}{(3 \cdot n_{is} + 2 \cdot j_s - n_{ik} - n_s - j_i - n - j_{sa}^{ik} - 2 \cdot k)!}$$

$$\frac{1}{(n + j_{sa}^s - j_s - s)!}$$

GÜLDÜNYA

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa}^s = j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s = 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned} z S_{j_s, j_i}^{DOSD} &= \sum_{k=1}^{l-1} \sum_{(j_s=2)}^{(l_i+n-D-s)} \sum_{j_i=l_i+n-D}^{l_i-k+1} \\ &\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}} \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \\ &\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \\ &\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\ &\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \\ &\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \end{aligned}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{i-1} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{sa}-k-j_{sa}+2)} \sum_{j_i=j_s+s-1}^{l_i-k+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_j=n-j_i+1}^{n_{is}+j_s-1}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_s - j_i + 1)!} \cdot$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_i + j_s - n_s - j_i)!} \cdot$$

$$\frac{(n_s - j_i - n - 1)!}{(n_i - j_i - 1)!} \cdot$$

$$\frac{(l_i - j_s - k - 1)!}{(l_i - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s - l_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^i \sum_{(j_s=1)}^{()} \sum_{j_i=l_i+n-D}^{l_i-i+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_s=n-j_i+1)}^{(n_i-j_i-k+1)}$$

$$\frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

GÜLDÜZMAYA

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{sa}-k-j_{sa}+2)} \sum_{j_i=j_s+s-1} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_{sa}^s-k)}^{()} \frac{(3 \cdot n_{is} + j_s + j_{sa}^s - n_{ik} - n_s - j_i - s + 2 \cdot k)!}{(3 \cdot n_{is} + 2 \cdot j_s - n_{ik} - n_s - n - j_{sa}^{ik} - k)!} \cdot \frac{1}{(n + k - j_s - s)!} \cdot \frac{(l_s - k)}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_i - s + 1 \wedge$

$j_s + s - 1 \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + n = l_s \wedge l_s + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$D + s - n < l_i \leq D + l_s + n - 1 \wedge$

$D \geq l_i < n \wedge I = k \geq 1 \wedge$

$j_{sa}^s = j_{sa}^i \wedge$

$s: \{1, \dots, i\}_{sa} \wedge$

$s = 2 \wedge s = n + k \wedge$

\Rightarrow

$$fz_{j_s, j_i}^{SDOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(j_i-s+1)} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{ik}+s-k-j_{sa}^{ik}+1}$$

$$\begin{aligned}
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-l_k} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=2}^{i^{l-1} (l_{ik} - j_{sa}^{ik} + 2)} \sum_{j_i=l_{ik}+s-k-j_{sa}^{ik}+1}^{l_{sa}+s-k-j_{sa}+1} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-l_k} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +
\end{aligned}$$

$$\sum_{k=1}^l \sum_{(j_s=1)}^{()} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{sa}+s-i-l-j_{sa}+1} \sum_{n_i=n+k}^n \sum_{(n_s=n-j)}^{(n_i-j_i-k+1)} \frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n_s)! \cdot (n_s - j_i)!} \cdot \frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s - 1)! \cdot (j_i - s)!} \cdot \frac{(l_i - l_s - 1)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

$$\sum_{k=1}^{D+l_s+s-n} \sum_{(j_s=1)}^{()} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{ik}+s-k-j_{sa}^{ik}+1} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-k)}^{()} \frac{(n_{is} + j_s + j_{sa}^s - n_{ik} - n_s - j_i - j_{sa}^{ik} - s - 2 \cdot k)!}{(3 \cdot n_{is} + 2 \cdot j_s - n_{ik} - n_s - j_i - n - j_{sa}^{ik} - 2 \cdot k)!} \cdot \frac{1}{(n + j_{sa}^s - j_s - s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_i - s + 1 \wedge$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge I = k \geq 0 \wedge$$

$$j_{sa}^s = j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, k, j_{sa}^i\} \wedge$$

$$s = 2 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, l_i}^{DOSD} = \sum_{k=1}^{i-1} \sum_{j_s=l_{sa}+n-D-j_{sa}+1}^{l_{sa}+n-D-j_{sa}+s-k-j_{sa}+1} \sum_{j_i=j_s+s-1}^{l_{sa}+s-k-j_{sa}+1} \frac{(n_i - n_{is} - 1)!}{(i - j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{i-1} \sum_{j_s=l_{sa}+n-D-j_{sa}+1}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j_i=j_s+s-1}^{l_{sa}+s-k-j_{sa}+1} \sum_{n_i=n+k}^n \sum_{n_{is}=n+k-j_s+1}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - 1)!}{(j_s + l_i - j_i - 1)! \cdot (j_i - j_s + 1)!}$$

$$\frac{(n - l_i)!}{(n - l_i - 1)! \cdot (n - j_i)!}$$

$$\sum_{j_s=1}^{l_{sa}} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{sa}+n+s-D-j_{sa}+1}$$

$$\sum_{n_i=n+k}^n \sum_{n_s=n-j_i+1}^{(n_i-j_i-k+1)}$$

$$\frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j_i=j_s+s-1}$$

$$\sum_{n_i=n+k}^n \sum_{n_{is}=n+k-j_s+1}^{(n_i-j_s+1)}$$

GÜLDÜMÜNNA

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{()}^{()} (n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-k)$$

$$\frac{(3 \cdot n_{is} + j_s + j_{sa}^s - n_{ik} - n_s - j_i - j_{sa}^{ik} - s - 2 \cdot k)!}{(3 \cdot n_{is} + 2 \cdot j_s - n_{ik} - n_s - j_i - n - j_{sa}^{ik} - 2 \cdot k)!}$$

$$\frac{1}{(n + j_{sa}^s - j_s - k)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - l_i)!}$$

$$((D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1)) \wedge$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1)) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1)) \wedge$$

$$D \geq n < n \wedge I = k \geq 0 \wedge$$

$$j_{sa}^s = j_{sa}^i - 1 \wedge$$

$s: \{j_{sa}^s, k, j_{sa}^i\} \wedge$

$s = 2 \wedge s = s + k \wedge$

$k_z: z = 1 \Rightarrow$

$$fz_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(j_i-s+1)} \sum_{j_i=l_{sa}+n+s-D-j_s}^{l_s+s-k} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(l_s-k+1)} \sum_{j_i=l_s+s-k+1}^{l_{sa}+s-k-j_{sa}+1} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

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$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{l_s} \sum_{(j_s=1)}^{l_s+s-k} \sum_{i=l_s+n+s-D-j_s}^{l_s+s-k-l-j_s+1} \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_s=n-j_i+1)}^{(n_i-j_s+1)}$$

$$\frac{(n_i - j_s)!}{(j_i - n)! \cdot (n_i - n_s - j_i + 1)!}$$

$$\frac{(n_s - j_i - n - 1)!}{(n_s - j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_i - l_s + 1)! \cdot (j_i - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

$$\sum_{k=1}^{l_s+s-n-l_i} \sum_{(j_s=j_i-s+1)}^{l_s+s-k} \sum_{j_i=l_s+n+s-D-j_s}^{l_s+s-k}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_s=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-k)} \sum_{(j_s=1)}^{l_s+s-k}$$

$$\frac{(3 \cdot n_{is} + j_s + j_{sa}^s - n_{ik} - n_s - j_i - j_{sa}^{ik} - s - 2 \cdot k)!}{(3 \cdot n_{is} + 2 \cdot j_s - n_{ik} - n_s - j_i - n - j_{sa}^{ik} - 2 \cdot k)!}$$

$$\frac{1}{(n + j_{sa}^s - j_s - s)!}$$

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$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 1 \wedge$$

$$j_{sa}^s = j_{sa}^l - s$$

$$s: \{l_{sa}, l_{sa}^i\} \wedge$$

$$s = 2 \wedge s = l_{sa} + \mathbb{k} \wedge$$

$$\mathbb{k} \geq 1 \Rightarrow$$

$$fz S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(l_{sa}+n-D-j_{sa})} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{sa}+s-k-j_{sa}+1}$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-l_k} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=0}^{i^{l-1}} \sum_{j_i=j_s+s-1}^{(l_s-1) \cdot l_{sa+s-k-j_{sa}+1}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-l_k} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +
 \end{aligned}$$

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$$\begin{aligned}
 & \sum_{k=1}^l \sum_{(j_s=1)}^{()} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{sa}+s-i^{l-j_{sa}+1}} \\
 & \sum_{n_i=n+k}^n \sum_{(n_s=n-j)}^{(n_i-j_i-k+1)} \\
 & \frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n_s - 1)! \cdot (n_s - j_i)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s - 1)! \cdot (j_i - s)!} \cdot \\
 & \frac{(l_s - 1)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{D+l_s+s-n} \sum_{(j_s=1)}^{(l_s-n)} \sum_{j_i=j_s+s-1}^{(n-D-j_{sa}+1)} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^{ik})}^{()} \\
 & \frac{(n_{is} + j_s + j_{sa}^s - n_{ik} - n_s - j_i - j_{sa}^{ik} - s - 2 \cdot l_k)!}{(3 \cdot n_{is} + 2 \cdot j_s - n_{ik} - n_s - j_i - n - j_{sa}^{ik} - 2 \cdot l_k)!} \cdot \\
 & \frac{1}{(n + j_{sa}^s - j_s - s)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq j_s \leq j_i - s + 1 \wedge$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k, j_{sa}^i\} \wedge$$

$$s > 2 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$f_z^{DOSD} = \sum_{k=1}^{D-n+1} \sum_{j_i=l_i+n-D}^{(j_i-s+1)} \sum_{j_i=l_i+n-D}^{l_{ik}+k+1} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_i+j_s-j_i-k} \frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n - n_s - k - 1)!}{(j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - k)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j_i=l_{ik}+s-k-j_{sa}^{ik}+2}^{l_i-k+1} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k}$$

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$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i - 1)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - 1)!}{(j_s + l_i - j_i - 1)! \cdot (j_i - j_s - 1)!} \cdot \frac{(n - l_i)!}{(n - j_i - 1)! \cdot (n - j_i)!} \cdot \sum_{k=1}^{l_s + s - n - 1} \sum_{(j_s = j_i - k)} \sum_{j_i = l_i + n - D}^{j_{sa}^{ik} + 1} \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{k = n_{is} + j_{sa}^s - j_{sa}^{ik}}^{(n_s = n_{ik} + j_s + j_{sa}^{ik} - j_i - j_{sa}^s - \mathbb{k})} \frac{(3 \cdot n_{is} + j_s + j_{sa}^s - n_{ik} - n_s - j_i - j_{sa}^{ik} - s - 2 \cdot \mathbb{k})!}{(3 \cdot n_{is} + 2 \cdot j_s - n_{ik} - n_s - j_i - n - j_{sa}^{ik} - 2 \cdot \mathbb{k})!} \cdot \frac{1}{(n + j_{sa}^s - j_s - s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq j_s \leq j_i - s + 1 \wedge$

$j_s + s - 1 \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s > 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z^{DOSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{ik}+n-j_s+1)}^{(l_i+n-D-s)} \sum_{j_i=l_{ik}+n-D}^{l_i-k+1} \sum_{n_i=n-j_i-\mathbb{k}}^{n-j_s+1} \sum_{n_s=n-j_i+1}^{n-(n_i=n+\mathbb{k}-j_s+1)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} + j_s + 1)!} \cdot \frac{(n_s - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{D-n+1} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j_i=j_s+s-1}^{l_i-k+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!}$$

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$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s - 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+1, \dots, D-s+1)}^{(l_{ik}-l_s+1, \dots, l_s+1)} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n_{is}-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{is}=n_{is}-j_{sa}^{ik}, \dots, n_{is}=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-\mathbb{k})}^{()} \frac{(3 \cdot n_{is} + j_{sa}^s - j_s - j_i - j_{sa}^{ik} - s - 2 \cdot \mathbb{k})!}{(3 \cdot n_{is} + 2 \cdot n_{ik} - n_s - j_i - n - j_{sa}^{ik} - 2 \cdot \mathbb{k})!} \cdot \frac{1}{(n + j_{sa}^s - j_s - s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s = D - n + 1 \wedge 2 \leq j_s \leq j_s - s + 1 \wedge j_i + s - 1 \leq j_i \leq n \wedge l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge D \geq n < n \wedge I = \mathbb{k} > 0 \wedge j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge \mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}^i\} \vee \mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s > 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$fz_{j_s, j_i}^{DOSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(j_i-s+1)} \sum_{j_i=l_{ik}+n+s-D-j_s^{ik}}^{l_s+s-k}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_s - l_s + 1)!}{(j_s + j_i - l_s - 1)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)} \sum_{j_i=l_s+s-k+1}^{l_{ik}+s-k-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

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$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_i-s+1)}^{(\)} \sum_{j_i=l_{ik}+n+s-D-j_{sa}^{s-k}}^{l_s+s-k}$$

$$\sum_{n_i=n_{i-1}+j_{sa}^{s+1}}^n \sum_{n_{i-1}+j_{sa}^{s+1}}^{(j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s-k}}^{(\)} \sum_{n_{ik}+j_{sa}^{s-k}-j_i-j_{sa}^{s-k}}^{(\)}$$

$$\frac{(3 \cdot n_{ik} + j_s + j_{sa}^{s-k} - n_{ik} - n_{is} - j_i - j_{sa}^{s-k} - 2 \cdot \mathbb{k})!}{(3 \cdot n_{is} + 2 \cdot j_s - n_{ik} - n_s - j_i - j_{sa}^{s-k} - 2 \cdot \mathbb{k})!}$$

$$\frac{1}{(n + j_{sa}^s - j_s - s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D > n < n \wedge n > D - s + 1 \wedge$$

$$2 \leq i_s \leq j_i - s + 1 \wedge$$

$$j_i + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 \leq l_s \wedge l_{ik} - j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D > n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s > 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned}
 f_{zS}^{DOSD}_{j_s, j_i} &= \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_{ik}+n-D-j_s^{ik})} \sum_{j_i=l_{ik}+n+s-D-j_s^{ik}}^{l_{ik}+s-k-j_s^{ik}+1} \\
 &\quad \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i-k}^{n_{is}+j_s-j_i-k} \\
 &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 &\quad \frac{(n_{is} - n_s - k - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - k)!} \cdot \\
 &\quad \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 &\quad \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 &\quad \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 &\quad \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!} + \\
 &\quad \sum_{k=1}^{n+1} \sum_{(j_s=l_{ik}+n-D-j_s^{ik}+1)}^{(l_s-k+1)} \sum_{j_i=j_s+s-1}^{l_{ik}+s-k-j_s^{ik}+1} \\
 &\quad \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k} \\
 &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 &\quad \frac{(n_{is} - n_s - k - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - k)!} \cdot \\
 &\quad \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 &\quad \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 &\quad \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot
 \end{aligned}$$

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$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_s-k+1)} \sum_{j_i=j_s+s-1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{ik}+j_s+j_{sa}^{ik}-j_i+l_k)}^{(n_{ik}+j_s+j_{sa}^{ik}-j_i+l_k)}$$

$$\frac{(3 \cdot n_{is} + j_s + j_{sa}^s - n_{ik} - n_s - j_i - j_{sa}^{ik} - s - 2 \cdot l_k)!}{(3 \cdot n_{is} + 2 \cdot j_s - n_{ik} - n_s - j_i - j_{sa}^{ik} - 2 \cdot l_k)!}$$

$$\frac{(n + j_{sa}^s - j_s - s)!}{(l_s - k - 1)!}$$

$$\frac{(l_s - k - 1)!}{(j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik}) \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k, j_{sa}^i\} \wedge$$

$$s > 2 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$fz S_{j_s j_i}^{DOSD} = \sum_{k=1}^{D-n+1} \sum_{\substack{(j_s-s+1) \\ (j_s+n-D) \\ j_i=l_i+n-D}}^{s-k} \frac{\sum_{n_i=n+k}^{(n_i-j_s+1)} \sum_{n_{is}=n+k-j_s+1}^{n_{is}+j_s-j_i-k} \sum_{n_s=n-j_i+1}^{j_i+1}}{(j_s-2)! \cdot (n_i-n_{is}-1)!} \cdot \frac{(n_{is}-n_s-k-1)!}{(j_i-1)! \cdot (n_{is}+j_s-n_s-j_i-k)!} \cdot \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \frac{(l_i-l_s-s+1)!}{(j_s+l_i-j_i-l_s)! \cdot (j_i-j_s-s+1)!} \cdot \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)} \sum_{j_i=l_s+s-k+1}^{l_i-k+1} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k} \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!}$$

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$$\frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(l_i)!}{(D + j_i - n - l_i)! \cdot (j_i)!}$$

$$\sum_{n_i=n+1}^{D+l_s+s-n-l_i} \sum_{n_{is}=n+\mathbb{k}-j_s+1}^{l_s+s-n} \sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}}^{l_s+s-n} \sum_{n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^{ik}}^{l_i+n-D} (n_i - j_s + 1)$$

$$\frac{(n_{is} + j_s + 1 - n_{ik} - n_s - j_i - j_{sa}^{ik} - s - 2 \cdot \mathbb{k})!}{(3 + 2 - n_{ik} - n_s - j_i - n - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}$$

$$\frac{1}{(n + j_{sa}^s - j_s - s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n) \wedge l_s > D - n + 1 \wedge$$

$$l_i - j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik})) \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k, j_{sa}^i\}$$

$$s > 2 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$fz S_{j_s}^{SD} = \sum_{k=1}^{D-n} \sum_{j_s=l_s+n-D}^{(l_i+n-D-s)} \sum_{j_i=l_i+n-D}^{l_i-k+1} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - k - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - k)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\begin{aligned}
 & \sum_{k=1}^{D-n+1} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)} \sum_{j_i=j_s+s-1}^{l_i-k+1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - k - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} - n_s - k - 1)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - j_s - k + 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - l_s)! \cdot (n - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D - l_i - n - l_i)! \cdot (n - j_i)!} \\
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)} \sum_{j_i=j_s+s-1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^{ik})}^{(\quad)} \\
 & \frac{(3 \cdot n_{is} + j_s + j_{sa}^s - n_{ik} - n_s - j_i - j_{sa}^{ik} - s - 2 \cdot k)!}{(3 \cdot n_{is} + 2 \cdot j_s - n_{ik} - n_s - j_i - n - j_{sa}^{ik} - 2 \cdot k)!} \cdot \\
 & \frac{1}{(n + j_{sa}^s - j_s - s)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}
 \end{aligned}$$

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$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k, j_{sa}^i\} \wedge$$

$$s > 2 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$fzS_{j_s, j_i}^{DG} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(j_i-s+1)} \sum_{j_i=l_i+n-D}^{l_{sa}+s-k-j_{sa}+1} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - k - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - k)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_{sa}-k-j_{sa}+2)} \sum_{j_i=l_{sa}+s-k-j_{sa}+2}^{l_i-k+1}$$

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$$\begin{aligned}
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - 1)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_s - l_s - s + 1)!}{(j_s + l_i - l_s - s + 1)! \cdot (i_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{i=1}^{D+l_s+s-n-l_i} \sum_{s=j_i-s+1}^{()} \sum_{j_i=l_i+n-D}^{l_{sa}+s-k-j_{sa}+1} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^{ik})}^{()} \\
 & \frac{(3 \cdot n_{is} + j_s + j_{sa}^s - n_{ik} - n_s - j_i - j_{sa}^{ik} - s - 2 \cdot \mathbb{k})!}{(3 \cdot n_{is} + 2 \cdot j_s - n_{ik} - n_s - j_i - n - j_{sa}^{ik} - 2 \cdot \mathbb{k})!} \cdot \\
 & \frac{1}{(n + j_{sa}^s - j_s - s)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

$((D \geq n < n \wedge l_s > D - n + 1 \wedge$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k, j_{sa}^i\} \wedge$$

$$s > 2 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$\sum_{j_s, j_i}^{D-n+1, D} \sum_{(j_s=l_{sa}, \dots, D-j_{sa}+1)}^{D-s} \sum_{j_i=l_i+n-D}^{l_i-k+1} \sum_{n_i=n+k}^n \sum_{n_i=n+k-j_s+1}^{(n_i-j_s)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - k - 1)!}{(i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - k)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{D-n+1} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{sa}-k-j_{sa}+2)} \sum_{j_i=j_s+s-1}^{l_i-k+1}$$

$$\begin{aligned}
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - 1)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_s - l_s - s + 1)!}{(j_s + l_i - n - l_s - j_i - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{i=1}^{D+l_s+s-n-l_i} \sum_{k=l_i+n-D-s+1}^{j_{sa}-k-j_{sa}+2} \sum_{j_i=j_s+s-1}^n \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^{-\mathbb{k}})}^{()} \\
 & \frac{(3 \cdot n_{is} + j_s + j_{sa}^s - n_{ik} - n_s - j_i - j_{sa}^{ik} - s - 2 \cdot \mathbb{k})!}{(3 \cdot n_{is} + 2 \cdot j_s - n_{ik} - n_s - j_i - n - j_{sa}^{ik} - 2 \cdot \mathbb{k})!} \cdot \\
 & \frac{1}{(n + j_{sa}^s - j_s - s)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k, j_{sa}^i\} \wedge$$

$$s > 2 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$f_z^{SDOSD} = \sum_{k=1}^{D-n+1} \sum_{j_s=l_{ik}+n-D-j_{sa}^{ik}+1}^{(j_i-s+1)} \sum_{j_i=l_{ik}+s-k-j_{sa}^{ik}+1}^{(j_i-s+1)} \sum_{j_s=l_{ik}+n-D-j_{sa}^{ik}+1}^{(j_i-s+1)} \sum_{j_i=l_{ik}+s-k-j_{sa}^{ik}+1}^{(j_i-s+1)} \sum_{n_i=n+k}^n \sum_{n_{is}=n+k-j_s+1}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k}$$

$$\frac{(n_i - n_{is} - 1)!}{(i - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - k - 1)!}{(i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - k)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{D-n+1} \sum_{j_s=l_{ik}+n-D-j_{sa}^{ik}+1}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j_i=l_{ik}+s-k-j_{sa}^{ik}+2}^{l_{sa}+s-k-j_{sa}+1}$$

$$\sum_{n_i=n+k}^n \sum_{n_{is}=n+k-j_s+1}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i - 1)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - 1)!}{(j_s + l_i - j_i - 1)! \cdot (j_i - j_s - 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{k=1}^{D+l_i-n-l_i} \sum_{j_i-s+1}^{n-l_i} \sum_{l_{sa}+n+s-D-j_{sa}}^{n_{ik}^{ik}+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{k=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-\mathbb{k})} \frac{(3 \cdot n_{is} + j_s + j_{sa}^s - n_{ik} - n_s - j_i - j_{sa}^{ik} - s - 2 \cdot \mathbb{k})!}{(3 \cdot n_{is} + 2 \cdot j_s - n_{ik} - n_s - j_i - n - j_{sa}^{ik} - 2 \cdot \mathbb{k})!} \cdot \frac{1}{(n + j_{sa}^s - j_s - s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq j_s \leq j_i - s + 1 \wedge$

$j_s + s - 1 \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s > 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{D-n+1} \sum_{\substack{j_s=l_{ik}+n-D-j_{sa}^{ik}+1 \\ (n_{is}=n+\mathbb{k}-j_s+1)}}^{l_{sa}+n-D-j_{sa}} \sum_{\substack{j_i=l_{sa}+s-k-j_{sa}+1 \\ (n_s=n-j_i+1)}}^{l_{sa}+s-k-j_{sa}+1} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_s - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!} \cdot \frac{(n_s - 1)!}{(j_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{D-n+1} \sum_{\substack{j_s=l_{sa}+n-D-j_{sa}+1 \\ (n_{is}=n+\mathbb{k}-j_s+1)}}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{\substack{j_i=j_s+s-1 \\ (n_s=n-j_i+1)}}^{l_{sa}+s-k-j_{sa}+1} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!}$$

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$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s - 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{j_s=l_{sa}+n_{is}+j_{sa}+1}^{(l_{ik}-k-1) \wedge (n_{is}-j_s+1)} \sum_{j_i=j_s+1}^n \sum_{n_{is}=n+k}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{(n_{is}-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-j_i-j_{sa}^s-k}^{(n_{is}-j_s+1)} \frac{(3 \cdot n_{is} + j_{sa}^s - j_i - j_{sa}^{ik} - s - 2 \cdot k)!}{(3 \cdot n_{is} + 2 \cdot k - n_{ik} - n_s - j_i - n - j_{sa}^{ik} - 2 \cdot k)!} \cdot \frac{1}{(n + j_{sa}^s - j_s - s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$((D > n < n) \wedge (l_s - n + 1) \wedge$

$2 \leq j_s \leq j_i - s + 1 \wedge$

$j_s + s - 1 \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$

$(D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq j_s \leq j_i - s + 1 \wedge$

$j_s + s - 1 \leq j_i \leq n \wedge$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s > 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_{z, j_i}^{DOSD} = \sum_{k=1}^{D-1} \sum_{(j_s = l_s + n - D)}^{(j_i - k)} \sum_{l_s + s - k}^{l_s + s - k} \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_s = n - j_i + 1}^{(n_{is} + j_s - j_i - \mathbb{k})}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{D-n+1} \sum_{(j_s = l_s + n - D)}^{(l_s - k + 1)} \sum_{j_i = l_s + s - k + 1}^{l_{sa} + s - k - j_{sa} + 1}$$

$$\begin{aligned}
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - 1)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_s - l_s - s - 1)!}{(j_s + l_i - l_s - s + 1)! \cdot (i_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=0}^{l_s+s-n-l_i} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_s+s-k} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}}^{()} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^{ik})}^{()} \\
 & \frac{(3 \cdot n_{is} + j_s + j_{sa}^s - n_{ik} - n_s - j_i - j_{sa}^{ik} - s - 2 \cdot \mathbb{k})!}{(3 \cdot n_{is} + 2 \cdot j_s - n_{ik} - n_s - j_i - n - j_{sa}^{ik} - 2 \cdot \mathbb{k})!} \cdot \\
 & \frac{1}{(n + j_{sa}^s - j_s - s)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

$((D \geq n < n \wedge l_s > D - n + 1 \wedge$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}^i\} \vee s: \{j_{sa}^s, j_{sa}^{ik}, \mathbb{k}, j_{sa}^i\}$$

$$s > 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned} \mathbb{D}_{j_s, j_i}^{DOSD} &= \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_{sa}+n-D-j_{sa})} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{sa}+s-k-j_{sa}+1} \\ &\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}} \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ &\frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!} \cdot \\ &\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \end{aligned}$$

$$\begin{aligned}
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_s-k-1)} \sum_{j_i=j_s+s-1}^{l_{sa}+s-k-j_{sa}+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+l_k}^{j_i-l_k} \\
 & \frac{(n_{is}-1)!}{(j_s - 1)! \cdot (n_i - n_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - l_k - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - l_k)!} \cdot \\
 & \frac{(n_s - 1)!}{(n - j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} - \\
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_s-k-1)} \sum_{j_i=j_s+s-1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-l_k)}^{()}
 \end{aligned}$$

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$$\frac{(3 \cdot n_{is} + j_s + j_{sa}^s - n_{ik} - n_s - j_i - j_{sa}^{ik} - s - 2 \cdot \mathbb{k})!}{(3 \cdot n_{is} + 2 \cdot j_s - n_{ik} - n_s - j_i - n - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}$$

$$\frac{1}{(n + j_{sa}^s - j_s - s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!}$$

$$\frac{(D - \mathbb{k})!}{(D + j_i - n - l_i)!(n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$l_i \leq D + s - n \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}^i\} \vee s: \{j_{sa}^s, j_{sa}^{ik}, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s > 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$fz_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(j_i-s+1)} \sum_{j_i=s+1}^{l_{ik}+s-k-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{i l - 1} \sum_{(j_s=2)}^{(l_{ik} - k - j_{sa}^{ik} + 2)} \sum_{i=l_{ik}+s-1}^{l_{ik}+1} \sum_{j_{sa}^{ik}+2}^{j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(j_s+1)} \sum_{n_s=n-j_i+1}^{j_i-\mathbb{k}}$$

$$\frac{(n_i - n_s - \mathbb{k} - 1)!}{(j_s - 1)! \cdot (n_i - n_s - j_s + 1)!}$$

$$\frac{(n_i - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=i}^{\binom{\cdot}{l}} \sum_{(j_s=1)}^{l_i - i + 1} \sum_{j_i=s}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_s=n-j_i+1)}^{(n_i - j_i - \mathbb{k} + 1)}$$

$$\frac{(n_i - n_s - \mathbb{k} - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i - \mathbb{k} + 1)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

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$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$\sum_{k=1}^{i^l-1} \sum_{(j_s=j_i-s+1)}^{(\quad)} \sum_{j_i=s+1}^{l_{ik}+s-k-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+1}^n \sum_{n_s=n+j_s+1}^{(n+j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}+j_s+1}^n \sum_{n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^{ik}}^{(\quad)}$$

$$\frac{(3 \cdot n_{ik} + j_s + j_{sa}^{ik} - n_{ik} - n_s - j_i - j_{sa}^{ik} - 2 \cdot k)!}{(3 \cdot n_{is} + 2 \cdot j_s - n_{ik} - n_s - j_i - j_{sa}^{ik} - 2 \cdot k)!}$$

$$\frac{1}{(n + j_{sa}^s - j_s - s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=i^l}^{(\quad)} \sum_{(j_s=1)}^{(\quad)} \sum_{j_i=s}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{ik}=n_i-j_s-j_{sa}^{ik})}^{(\quad)} \sum_{n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^{ik}}$$

$$\frac{(3 \cdot n_i - n_{ik} - n_s - j_s - j_{ik} - j_i - s - 2 \cdot k + 3)!}{(3 \cdot n_i - n_{ik} - n_s - j_{ik} - j_i - n - 2 \cdot k + 2)! \cdot (n - s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l_i \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k, j_{sa}^i\} \wedge$$

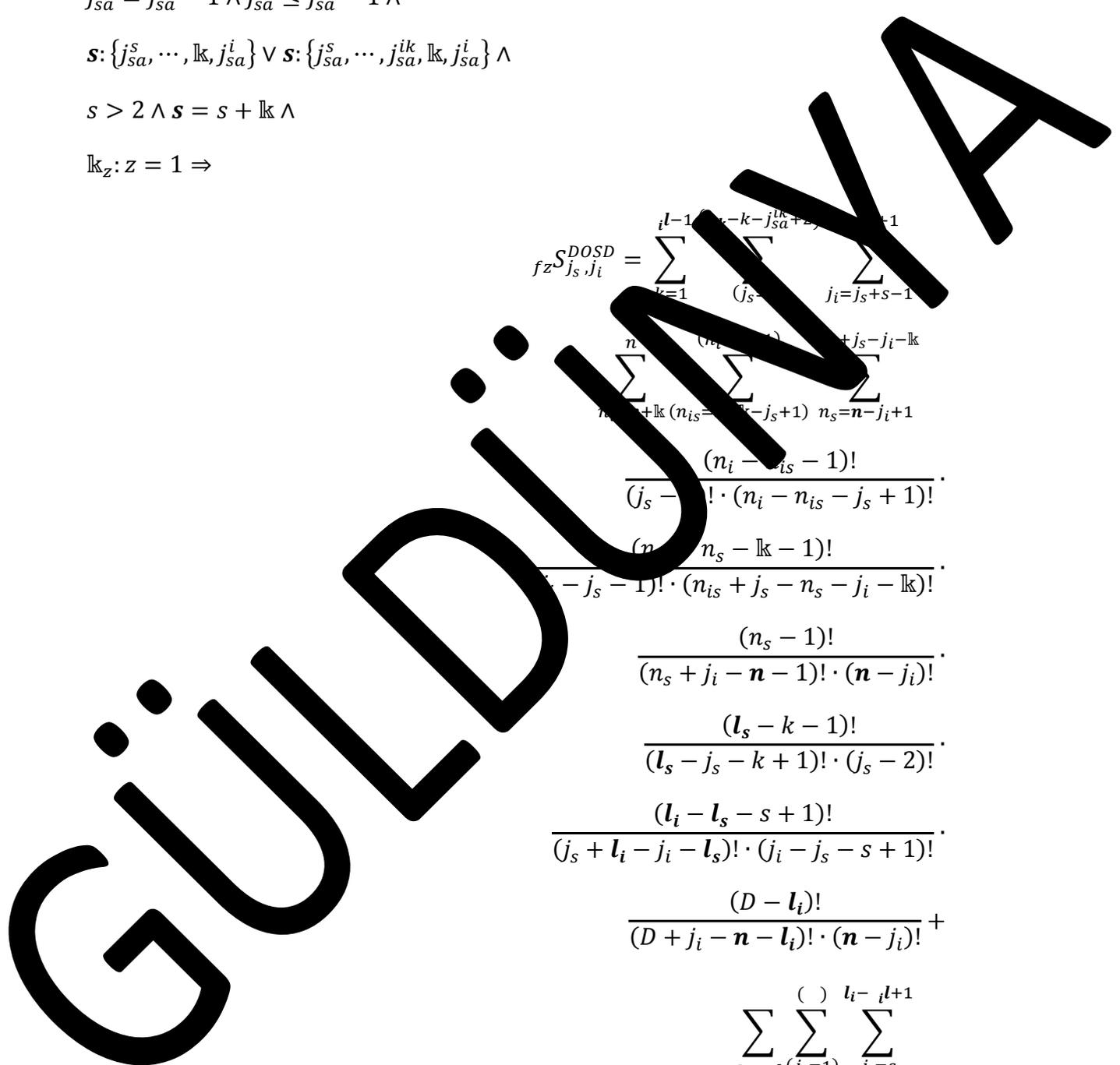
$$s > 2 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$fz_{j_s, j_i}^{SDOSD} = \sum_{k=1}^{l-1} \sum_{j_i=j_s+s-1}^{n-k-j_{sa}^{ik}+1} \sum_{n_i=n+k}^n \sum_{n_s=n-j_i+1}^{n_i-j_i-k} \frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n - n_s - k - 1)!}{(n - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - k)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^l \sum_{j_s=1}^{l-i} \sum_{j_i=s}^{l-i+1}$$

$$\sum_{n_i=n+k}^n \sum_{n_s=n-j_i+1}^{n_i-j_i-k+1}$$



$$\frac{(n_i - n_s - \mathbb{k} - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i - \mathbb{k} + 1)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - j_s - 1)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$\sum_{k=1}^{l-1} \sum_{j_i=j_s+1}^{l_{ik}-j_{ik}+2}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{n_{is}=n_i-j_s+1}^{(n_i-j_s+1)}$$

$$\sum_{n_{is}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-\mathbb{k}}$$

$$\frac{(3 \cdot n_{is} + j_{sa}^s - n_{ik} - n_s - j_i - j_{sa}^{ik} - s - 2 \cdot \mathbb{k})!}{(3 \cdot n_{is} + 2 \cdot n_{ik} - n_{ik} - n_s - j_i - n - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}$$

$$\frac{1}{(n + j_{sa}^s - j_s - s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{l-1} \sum_{j_s=1}^{()} \sum_{j_i=s}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{n_{ik}=n_i-j_s-j_{sa}^{ik}}^{()} \sum_{n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-\mathbb{k}}$$

$$\frac{(3 \cdot n_i - n_{ik} - n_s - j_s - j_{ik} - j_i - s - 2 \cdot \mathbb{k} + 3)!}{(3 \cdot n_i - n_{ik} - n_s - j_{ik} - j_i - n - 2 \cdot \mathbb{k} + 2)! \cdot (n - s)!}$$

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$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s > 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$j_{sa}^{DOSD} = \sum_{j_i=1}^{n-1} \sum_{(j_s=2)}^{(j_i-s+1)} \sum_{j_i=l_i+n-D}^{l_{ik}+s-k-j_{sa}^{ik}+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\begin{aligned}
 & \sum_{k=1}^{i^{l-1} (l_{ik-k-j_{sa}^{ik}+2)} } \sum_{(j_s=2)}^{l_i-k+1} \sum_{j_i=l_{ik+s-k-j_{sa}^{ik}+2}}^{l_i-k+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i}^{n_{is}+j_s-j_i-l_k} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - l_k - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n - l_k)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l_i - k + 1)!}{(j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_s - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^i \sum_{(j_s=1)}^{()} \sum_{j_i=l_i+n-D}^{l_i-i^{l+1}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_s=n-j_i+1)}^{(n_i-j_i-l_k+1)} \\
 & \frac{(n_i - n_s - l_k - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i - l_k + 1)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -
 \end{aligned}$$

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$$\sum_{k=1}^{D+l_s+s-n-l_i} \binom{()}{(j_s=j_i-s+1)} \sum_{j_i=l_i+n-D}^{l_{ik}+s-k-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_i=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \binom{()}{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_{sa}^s-l_k)}$$

$$\frac{(3 \cdot n_{is} + j_s + j_{sa}^s - n_{ik} - n_s - j_i - j_s + 2 \cdot l_k)!}{(3 \cdot n_{is} + 2 \cdot j_s - n_{ik} - n_s - j_i - n - j_{sa}^{ik} - l_k)!}$$

$$\frac{1}{(n + j_s - j_s - s)!}$$

$$\frac{(l_s - k)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq l_i \wedge$$

$$l_i - j_{sa}^{ik} + 1 = l_s \wedge l_i - j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + 1 - n + 1 \wedge$$

$$D \geq n < n \wedge l = l_k > 1 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^{ik}, l_k, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, l_k, j_{sa}^i\} \wedge$$

$$s > 2 \wedge s = j_{sa}^i + l_k \wedge$$

$$l_k \geq 2 \Rightarrow$$

$$fz S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i^{l-1}} \sum_{(j_s=2)}^{(l_i+n-D-s)} \sum_{j_i=l_i+n-D}^{l_i-k+1}$$

$$\begin{aligned}
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{i=0}^{i^l-1} \sum_{j_s=l_i+n-D-s+1}^{k-k-j_s^{\mathbb{k}+2})} \sum_{j_i=j_s+s-1}^{l_i-k+1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +
\end{aligned}$$

$$\begin{aligned}
 & \sum_{k=1}^{\binom{()}{l}} \sum_{j_s=1}^{l_i - l + 1} \sum_{j_i=l_i+n-D}^{n} \\
 & \sum_{n_i=n+k}^n \sum_{n_s=n-j}^{(n_i-j_i-k+1)} \\
 & \frac{(n_i - n_s - k - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i - k + 1)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n_s - j_i)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s - 1)! \cdot (j_i - s)!} \cdot \\
 & \frac{\binom{()}{l}}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{D+l_s+s-1} \sum_{j_i=l_i+n-D-s+1}^{(l_{ik}-k-1)k+2} \sum_{j_i=j_s+s-1}^n \\
 & \sum_{n_i=n+k}^n \sum_{n_s=n+k-j_s+1}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{\binom{()}{l}} \sum_{n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-k}^{(n_i-j_s+1)} \\
 & \frac{n_{is} + j_s + j_{sa}^s - n_{ik} - n_s - j_i - j_{sa}^{ik} - s - 2 \cdot k)!}{(3 \cdot n_{is} + 2 \cdot j_s - n_{ik} - n_s - j_i - n - j_{sa}^{ik} - 2 \cdot k)!} \cdot \\
 & \frac{1}{(n + j_{sa}^s - j_s - s)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_i - s + 1 \wedge$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

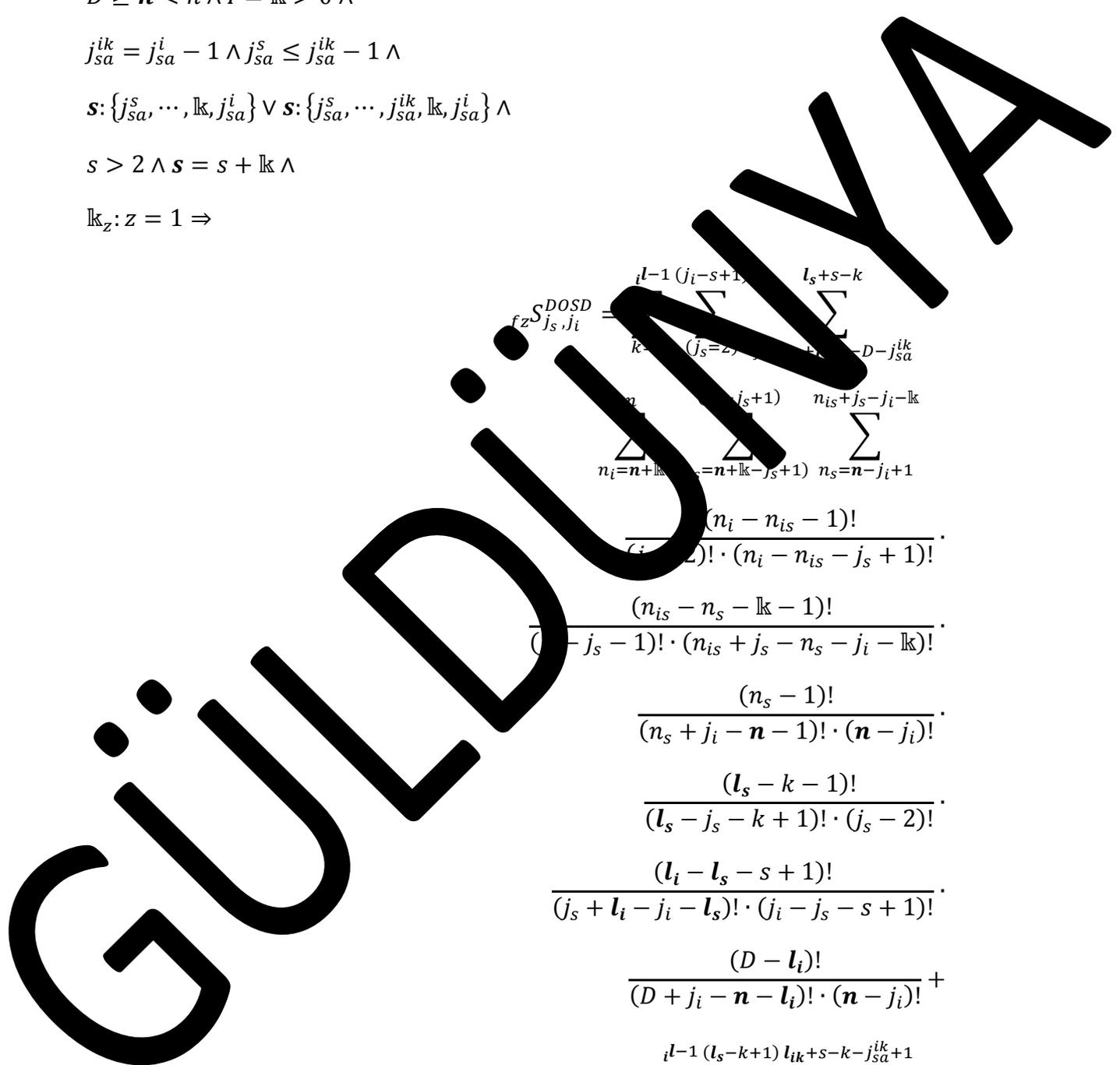
$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k, j_{sa}^i\} \wedge$$

$$s > 2 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$f_{j_s, j_i}^{DOSD} = \sum_{k=1}^{l-1} \sum_{(j_s=2)}^{(j_i-s+1)} \sum_{j_i=l_s+s-k}^{l_s+s-k} \sum_{n_i=n+k}^{n_i=j_s+1} \sum_{n_s=n-j_i+1}^{n_s=n+k-j_s+1} \frac{(n_i - n_{is} - 1)!}{(i - j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - k - 1)!}{(i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - k)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{l-1} \sum_{(j_s=2)}^{(l_s-k+1)} \sum_{j_i=l_s+s-k+1}^{l_{ik}+s-k-j_{sa}^{ik}+1} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k}$$



$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - s + 1)! \cdot (j_i - j_s - s + 1)!} \cdot$$

$$\frac{(n - l_i)!}{(n - j_i - n + l_i)! \cdot (n - j_i)!}$$

$$\sum_{i=1}^n \sum_{j_s=1}^{l_i} \sum_{j_i=l_{ik}+n+s-D-j_s a}^{l_{ik}+n+s-D-j_s a} \binom{l_{ik}}{a} \binom{l_{ik}}{a+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_s=n-j_i+1)}^{(n_i-j_i-\mathbb{k}+1)}$$

$$\frac{(n_i - n_s - \mathbb{k} - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i - \mathbb{k} + 1)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_i-s+1)} \binom{l_s+s-k}{j_i-s+1} \sum_{j_i=l_{ik}+n+s-D-j_s a}^{l_s+s-k} \binom{l_s+s-k}{j_i-s+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{()} (n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-k)$$

$$\frac{(3 \cdot n_{is} + j_s + j_{sa}^s - n_{ik} - n_s - j_i - j_{sa}^{ik} - s - 2 \cdot k)!}{(3 \cdot n_{is} + 2 \cdot j_s - n_{ik} - n_s - j_i - n - j_{sa}^{ik} - 2 \cdot k)!}$$

$$\frac{1}{(n + j_{sa}^s - j_s - k)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - l_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^{is}, \dots, k, j_{sa}^i\} \vee \{j_{sa}^{is}, \dots, j_{sa}^{ik}, k, j_{sa}^i\}$$

$$s > 2 \wedge s = s - 1 \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$fz_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(l_{ik}+n-D-j_{sa}^{ik})} \sum_{j_i=l_{ik}+n+s-D-j_{sa}^{ik}}^{l_{ik}+s-k-j_{sa}^{ik}+1} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - k - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - k)!}$$

$$\begin{aligned}
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s - 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{k=1}^{l-1} \sum_{j_i=l_{ik}+n-D-j_s-1}^{(l_s-k+1) \cdot (l_s+k-s-1) \cdot j_s^{ik}+1} \sum_{j_i=j_s+s-1}^{(n_i-j_s+1) \cdot (n_{is}+j_s-j_i-k)} \\
& \sum_{n_i=n+k}^{(n_i+n+k-j_s+1) \cdot (n_s-j_i+1)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_s - k - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - k)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=1}^{l-1} \sum_{j_i=l_{ik}+n+s-D-j_s^{ik}}^{(l_s-k+1) \cdot (l_s+k-s-1) \cdot j_s^{ik}+1} \sum_{n_i=n+k}^{(n_i-j_i-k+1)} \sum_{n_s=n-j_i+1}^{(n_i-j_i-k+1)} \\
& \frac{(n_i - n_s - k - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i - k + 1)!} \cdot
\end{aligned}$$

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$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_s-k+1)} \sum_{j_{sa}^{ik}=j_s-1}^{j_{sa}^{ik}=j_s-1}$$

$$\sum_{n_i=n}^n \sum_{n_{is}=n+l_k-j_s+1}^{n_{is}=n+l_k-j_s+1}$$

$$\sum_{n_{ik}=n_{is}}^{n_{ik}=n_{is}-j_{sa}^{ik}} \sum_{(n_{sa}^{ik}=j_s+j_{sa}^{ik}-j_i-j_{sa}^{ik}-l_k)}$$

$$\frac{(3 \cdot n_{is} + j_{sa}^s - n_{ik} - j_i - j_{sa}^k - s - 2 \cdot l_k)!}{(3 \cdot n_{is} + 2 \cdot j_{sa}^s - n_{ik} - n_s) \cdot (j_i - n - j_{sa}^{ik} - 2 \cdot l_k)!}$$

$$\frac{1}{(n + j_{sa}^s - j_s - s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + j_{sa}^{ik} = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$(j_{sa}^{ik} - n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s \leq j_i \leq n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$l_i \leq D + s - n)) \wedge$$

$$D \geq n < n \wedge l_i - s + 1 > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^s - k \wedge j_{sa}^s \leq j_i - k - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k, j_{sa}^i\} \quad s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}^s\} \wedge$$

$$s > z \quad s = s + k \wedge$$

$$k_z: z = 1 =$$

$$fz S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(j_i-s+1)} \sum_{j_i=s+1}^{l_s+s-k}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - k - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - k)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 1)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(l_i)!}{(D + j_i - n - l_i)! \cdot (j_i)!} +$$

$$\sum_{k=1}^{i-1} \sum_{j_s=1}^{(l_s-k+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k} \dots$$

$$\frac{(n_i - n_{is} - 1)!}{(i - 1)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - k - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - k)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{i-1} \sum_{j_s=1}^{(l_s-k+1)} \sum_{j_i=s}^{l_i-i+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_s=n-j_i+1)}^{(n_i-j_i-k+1)}$$

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$$\frac{(n_i - n_s - \mathbb{k} - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i - \mathbb{k} + 1)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - 1)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$\sum_{k=0}^{i-l} \sum_{j_i=j_i-s+1}^{i-l-k} \binom{i-l-k}{j_i} \binom{i-l-k-j_i}{i-l-k-j_i-s+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \binom{n_i-j_s+1}{n_i-j_s+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-\mathbb{k}}^{\binom{)}{n_i-j_s+1}}$$

$$\frac{(3 \cdot n_{is} + j_{sa}^s - n_{ik} - n_s - j_i - j_{sa}^{ik} - s - 2 \cdot \mathbb{k})!}{(3 \cdot n_{is} + 2 \cdot \mathbb{k} - n_{ik} - n_s - j_i - n - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}$$

$$\frac{1}{(n + j_{sa}^s - j_s - s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=0}^{i-l} \sum_{j_s=1}^{\binom{)}{j_s-1}} \sum_{j_i=s}^{\binom{)}{j_i-s}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{n_{ik}=n_i-j_s-j_{sa}^{ik}}^{\binom{)}{n_i-j_s+1}} \sum_{n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-\mathbb{k}}$$

$$\frac{(3 \cdot n_i - n_{ik} - n_s - j_s - j_{ik} - j_i - s - 2 \cdot \mathbb{k} + 3)!}{(3 \cdot n_i - n_{ik} - n_s - j_{ik} - j_i - n - 2 \cdot \mathbb{k} + 2)! \cdot (n - s)!}$$

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$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$((D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s$$

$$(l_i \leq D + s - n) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^l - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s > 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned}
fz S_{j_s, j_i}^{DOSD} &= \sum_{k=1}^{i^{l-1} (l_s - k + 1)} \sum_{(j_s=2)}^{l_i - k + 1} \sum_{j_i = j_s + s - 1} \\
&\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{i_s} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_s = n - j_i}^{n_{i_s} + j_s - j_i - \mathbb{k}} \\
&\frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \\
&\frac{(n_{i_s} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{i_s} + j_s - n_s - \mathbb{k})!} \cdot \\
&\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
&\frac{(l_s - l_i - k + 1)!}{(l_s - l_i - s + 1)!} \cdot \\
&\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_s - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
&\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!} + \\
&\sum_{k=1}^{i^l} \sum_{(j_s=1)}^{i^l} \sum_{j_i=s}^{i^l} \\
&\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_s = n - j_i + 1)}^{(n_i - j_i - \mathbb{k} + 1)} \\
&\frac{(n_i - n_s - \mathbb{k} - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i - \mathbb{k} + 1)!} \cdot \\
&\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
&\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!} \cdot \\
&\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!} -
\end{aligned}$$

$$\begin{aligned}
 & \sum_{k=1}^{i^{l-1} (l_s-k+1)} \sum_{(j_s=2)} \sum_{j_i=j_s+s-1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s-2)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{i_s}+j_{sa}^s-j_{sa}^{ik} (n_s=n_{ik}+j_s+j_{sa}^{ik}-j_{sa}^s-l_k)}^{(\quad)} \\
 & \frac{(3 \cdot n_{i_s} + j_s + j_{sa}^s - n_{ik} - n_s - j_i - j_s - 2 \cdot l_k)!}{(3 \cdot n_{i_s} + 2 \cdot j_s - n_{ik} - n_s - j_i - j_s - 2 \cdot l_k)!} \cdot \frac{1}{(n + j_s - j_s - s)!} \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - j_i)!} \\
 & \sum_{k=i^l}^{(\quad)} \sum_{(j_s=1)} \sum_{j_i=s}^{(\quad)} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n_i-j_s-j_{sa}^{ik} (n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-l_k)}^{(\quad)} \\
 & \frac{(n_i - n_{ik} - n_s - j_s - j_{ik} - j_i - s - 2 \cdot l_k + 3)!}{(3 \cdot n_i - n_{ik} - n_s - j_{ik} - j_i - n - 2 \cdot l_k + 2)! \cdot (n - s)!} \cdot \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}
 \end{aligned}$$

$$((D \geq n < l_i \wedge l_s \leq D - n + 1 \wedge$$

$$n_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \wedge$$

$$D \geq n < n \wedge l_i - l_s > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^s - k \wedge j_{sa}^s \leq j_i - k - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k, j_{sa}^i\} \quad s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}^s\} \wedge$$

$$s > z \quad s = s + k \wedge$$

$$k_z: z = 1 =$$

$$fz S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(j_i-s+1)} \sum_{j_i=l_i+n-D}^{l_s+s-k}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - k - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - k)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(l_i)!}{(D + j_i - n - l_i)! \cdot (j_i)!} +$$

$$\sum_{k=1}^{i-1} \sum_{j_s=0}^{(l_s-k-1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k} \sum_{n_i=n+k}^{n-j_s+1} \dots$$

$$\frac{(n_i - n_{is} - 1)!}{(i - l_i - 1)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - k - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - k)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^i \sum_{j_s=1}^{()} \sum_{j_i=l_i+n-D}^{l_i-i+1}$$

$$\sum_{n_i=n+k}^n \sum_{n_s=n-j_i+1}^{(n_i-j_i-k+1)}$$

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$$\frac{(n_i - n_s - k - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i - k + 1)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - l_s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{j_i=s+1}^{n-l_i-k}$$

$$\sum_{n_i=n+k}^n \sum_{j_s=j_i+1}^{(n_i-j_s+1)}$$

$$\sum_{n_i=n+l_s}^n \sum_{j_s=n_i+k}^{(n_i-j_s+1)}$$

$$\frac{(3 \cdot n_{is} + j_{sa}^{is} - j_{sa}^{ik} - j_i - j_{sa}^{ik} - s - 2 \cdot k)!}{(3 \cdot n_{is} + 2 \cdot k - n_{ik} - n_s - j_i - n - j_{sa}^{ik} - 2 \cdot k)!}$$

$$\frac{1}{(n + j_{sa}^s - j_s - s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_i \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_i + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^s, \dots, k, j_{sa}^i\} \quad s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \dots, i\} \wedge$$

$$s > 2 \wedge s = i + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(l_i+n-D-s)} \sum_{j_i=l_i+n-D}^{l_i-k+1} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - k - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - k)!}$$

$$\begin{aligned}
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{i-1} \sum_{j_s=l_i+1}^{l_s-k+1} \sum_{j_i=j_s+1}^{n-j_s-k+1} \frac{(n_i - j_s + 1)! \cdot (n_{is} + j_s - j_i - k)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \sum_{n_i=n+k}^{n+l_i} \sum_{n_s=n+k-j_s+1}^{n+l_i-j_s+1} \sum_{j_i=j_s+1}^{n-j_s-k+1} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - k - 1)!}{(j_i - 2)! \cdot (n_{is} + j_s - n_s - j_i - k)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=i}^{l_i} \sum_{j_s=1}^{l_i-k+1} \sum_{j_i=l_i+n-D}^{l_i-k+1} \frac{(n_i - j_i - k + 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i - k + 1)!} \cdot
 \end{aligned}$$

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$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)} \sum_{j_{s+1}^{s+1}}$$

$$\sum_{n_i=n}^n \sum_{(n_{is}=n+k-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}^{s-1} - j_{sa}^{ik} (n_{is}^{s-1} + j_s + j_{sa}^{ik} - j_i - j_{sa}^{ik})}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_{sa}^s - n_{ik} - j_i - j_{sa}^{ik} - s - 2 \cdot \mathbb{k})!}{(3 \cdot n_{is} + 2 \cdot j_{sa}^s - n_{ik} - n_s - j_i - n - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}$$

$$\frac{1}{(n + j_{sa}^s - j_s - s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D + n + 1 \wedge$$

$$1 \leq j_s \leq j_{s+1} \wedge$$

$$j_s + 1 \leq j_i$$

$$l_{ik} - j_{sa}^{ik} + j_{sa}^{ik} = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_s < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s > 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned}
 f_z^{DOSD} S_{j_s, j_i}^{DOSD} &= \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(j_i-s+1)} \sum_{j_i=l_i+n-D}^{l_{sa}+s-k-j_{sa}+1} \\
 &\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \\
 &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} + 1)!} \cdot \\
 &\frac{(n_{is} - n_s - 1)!}{(j_i - j_s) \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!} \cdot \\
 &\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 &\frac{(l_s - k - 1)!}{(l_s + j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 &\frac{(l_s - l_s - s + 1)!}{(j_s + l_s - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 &\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 &\sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(l_{sa}-k-j_{sa}+2)} \sum_{j_i=l_{sa}+s-k-j_{sa}+2}^{l_i-k+1} \\
 &\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}} \\
 &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 &\frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!} \cdot \\
 &\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot
 \end{aligned}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{(j_s - l_i - l_s + 1)} \sum_{(j_s=1)}^{(j_s - l_i - l_s + 1)} \sum_{j_i=l_i+n-D}^{(j_s - l_i - l_s + 1)} \sum_{n_i=n+l_k}^n \sum_{(n_s=n-j_i+1)}^{(n_i - j_s + 1)} \frac{(n_i - l_s - k - 1)!}{(n_i - n_s - j_i - k + 1)!} \cdot \frac{(n_s - j_i - n - 1)! \cdot (n - j_i)!}{(l_i - l_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} - \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_i-s+1)}^{(j_s - l_i - l_s + 1)} \sum_{j_i=l_i+n-D}^{l_{sa}+s-k-j_{sa}+1} \sum_{n_i=n+l_k}^n \sum_{(n_s=n+l_k-j_s+1)}^{(n_i - j_s + 1)} \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{(j_s - l_i - l_s + 1)} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-l_k)}^{(j_s - l_i - l_s + 1)} \frac{(3 \cdot n_{is} + j_s + j_{sa}^s - n_{ik} - n_s - j_i - j_{sa}^{ik} - s - 2 \cdot l_k)!}{(3 \cdot n_{is} + 2 \cdot j_s - n_{ik} - n_s - j_i - n - j_{sa}^{ik} - 2 \cdot l_k)!} \cdot \frac{1}{(n + j_{sa}^s - j_s - s)!}$$

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$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s > 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned} z S_{j_s, j_i}^{DOSD} &= \sum_{k=1}^{l_i-1} \sum_{(j_s=2)}^{(l_i+n-D-s)} \sum_{j_i=l_i+n-D}^{l_i-k+1} \\ &\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}} \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!} \\ &\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \\ &\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \end{aligned}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{i-1} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{sa}-k-j_{sa}+2)} \sum_{j_i=j_s+s-1}^{l_i-k+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{=n-j_i+1}^{n_{is}+j_s-}$$

$$\frac{(n_i - n_{is} - \mathbb{k} - 1)!}{(j_s - 2)! \cdot (n_i - n_s - j_i - \mathbb{k} + 1)!} \cdot$$

$$\frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!} \cdot$$

$$\frac{(n_s - j_i - n - 1)!}{(n_s - j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_i - j_s - k - 1)!}{(l_i - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s - l_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{()} \sum_{(j_s=1)}^{()} \sum_{j_i=l_i+n-D}^{l_i-i+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_s=n-j_i+1)}^{(n_i-j_i-k+1)}$$

$$\frac{(n_i - n_s - \mathbb{k} - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i - \mathbb{k} + 1)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

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$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{sa}-k-j_{sa}+2)} \sum_{j_i=j_s+s-1}^{(n_i-j_s+1)} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_{sa}^s-k)}^{()} \frac{(3 \cdot n_{is} + j_s + j_{sa}^s - n_{ik} - n_s - j_i - s + 2 \cdot \mathbb{k})!}{(3 \cdot n_{is} + 2 \cdot j_s - n_{ik} - n_s - n - j_{sa}^s - \mathbb{k})!} \cdot \frac{1}{(n + s - j_s - s)!} \cdot \frac{(l_s - k)}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_i - s + 1 \wedge$

$j_s + s - 1 \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + n = l_s \wedge l_s + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$D + s - n < l_i \leq D + l_s + n - 1 \wedge$

$D \geq l_i < n \wedge I = \mathbb{k} > 1 \wedge$

$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^i - 1 \wedge$

$s: \{j_{sa}^i, \mathbb{k}, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}^i\} \wedge$

$s > 2 \wedge s = j_{sa}^i + \mathbb{k} \wedge$

\Rightarrow

$$fz_{j_s, j_i}^{SDOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(j_i-s+1)} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{ik}+s-k-j_{sa}^{ik}+1}$$

$$\begin{aligned}
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=2}^{i^{l-1} (l_{ik} - j_{sa}^{ik} + 2)} \sum_{j_i=l_{ik}+s-k-j_{sa}^{ik}+1}^{l_{sa}+s-k-j_{sa}+1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +
\end{aligned}$$

$$\begin{aligned}
 & \sum_{k=1}^{\binom{D+l_s+s-n}{j_s=1}} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{sa}+s-i^{l-j_{sa}+1}} \\
 & \sum_{n_i=n+k}^n \sum_{(n_s=n-j)}^{(n_i-j_i-k+1)} \\
 & \frac{(n_i - n_s - k - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i - k + 1)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n_s - j_i)!} \cdot \\
 & \frac{(l_s - l_s - s + 1)!}{(l_s - j_i - l_s - 1)! \cdot (j_i - s)!} \cdot \\
 & \frac{\binom{D+l_s+s-n}{j_s=1}}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{D+l_s+s-n} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{\binom{D+l_s+s-n}{j_s=1}} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{ik}+s-k-j_{sa}^{ik}+1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-k)}^{\binom{D+l_s+s-n}{j_s=1}} \\
 & \frac{(n_{is} + j_s + j_{sa}^s - n_{ik} - n_s - j_i - j_{sa}^{ik} - s - 2 \cdot k)!}{(3 \cdot n_{is} + 2 \cdot j_s - n_{ik} - n_s - j_i - n - j_{sa}^{ik} - 2 \cdot k)!} \cdot \\
 & \frac{1}{(n + j_{sa}^s - j_s - s)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_i - s + 1 \wedge$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k, j_{sa}^i\} \wedge$$

$$s > 2 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, l_i}^{DOSD} = \sum_{k=1}^{i-1} \sum_{j_s=l_{sa}+n-D-j_{sa}+k}^{l_{sa}+n-D-j_{sa}+s-k-j_{sa}+1} \sum_{j_i=j_s+1}^{n-j_s+1} \sum_{n_i=n+k}^{n-j_s+1} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k} \frac{(n_i - n_{is} - 1)!}{(i - j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - k - 1)!}{(i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - k)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{i-1} \sum_{j_s=l_{sa}+n-D-j_{sa}+1}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j_i=j_s+s-1}^{l_{sa}+s-k-j_{sa}+1} \sum_{n_i=n+k}^n \sum_{n_{is}=n+k-j_s+1}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k}$$

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$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - s + 1)! \cdot (j_i - j_s + 1)!}$$

$$\frac{(n - l_i)!}{(n - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{i=1}^n \sum_{j_s=1}^{l_{sa}} \sum_{j_i=1}^{l_{sa} + n + s - D - j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_s=n-j_i+1)}^{(n_i-j_i-\mathbb{k}+1)}$$

$$\frac{(n_i - n_s - \mathbb{k} - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i - \mathbb{k} + 1)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j_i=j_s+s-1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{()}^{()} (n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-k)$$

$$\frac{(3 \cdot n_{is} + j_s + j_{sa}^s - n_{ik} - n_s - j_i - j_{sa}^{ik} - s - 2 \cdot k)!}{(3 \cdot n_{is} + 2 \cdot j_s - n_{ik} - n_s - j_i - n - j_{sa}^{ik} - 2 \cdot k)!}$$

$$\frac{1}{(n + j_{sa}^s - j_s - k)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - l_i)!}$$

$$((D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1)) \wedge$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1)) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1)) \wedge$$

$$D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}^i\} \vee \mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s > 2 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$fz_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(j_i-s+1)} \sum_{j_i=l_{sa}+n+s-D-j_s}^{l_s+s-k} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(j_i - n_{is} - 1)! \cdot (n_{is} + j_s - n_s - \mathbb{k} - 1)!}{(n_s - 1)! \cdot (n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(l_s-k+1)} \sum_{j_i=l_s+s-k+1}^{l_{sa}+s-k-j_{sa}+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{l_s} \sum_{(j_s=1)}^{l_s+s-k} \sum_{i=l_s+n+s-D-j_s}^{l_s+s-k-l-j_s+1} \frac{(l_s+s-k-l-j_s+1)!}{(l_s+s-k-l-j_s+1)! \cdot (l_s+s-k-l-j_s+1)!}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_s=n-j_i+1)}^{(n_i-j_s+1)}$$

$$\frac{(n_i - l_s - k - 1)!}{(n_i - n_s - j_i - k + 1)! \cdot (n_i - n_s - j_i - k + 1)!}$$

$$\frac{(n_s + j_i - n - 1)! \cdot (n - j_i)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_i - l_s + 1)! \cdot (j_i - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

$$\sum_{k=1}^{l_s+s-n-l_i} \sum_{(j_s=j_i-s+1)}^{l_s+s-k} \sum_{j_i=l_s+n+s-D-j_s}^{l_s+s-k}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_s=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-k)} \sum_{(j_s=j_i-s+1)}^{(n_i-j_s+1)}$$

$$\frac{(3 \cdot n_{is} + j_s + j_{sa}^s - n_{ik} - n_s - j_i - j_{sa}^{ik} - s - 2 \cdot k)!}{(3 \cdot n_{is} + 2 \cdot j_s - n_{ik} - n_s - j_i - n - j_{sa}^{ik} - 2 \cdot k)!}$$

$$\frac{1}{(n + j_{sa}^s - j_s - s)!}$$

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$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 1 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - j_{sa}^s \leq j_i - 1 \wedge$$

$$s: \{j_{sa}^i, \mathbb{k}, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s > 2 \wedge s = j_s + \mathbb{k} \wedge$$

$$\mathbb{k} \geq 1 \Rightarrow$$

$$fz S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(l_{sa}+n-D-j_{sa})} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{sa}+s-k-j_{sa}+1}$$

$$\begin{aligned}
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=0}^{i^{l-1}} \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)!} \sum_{j_i=j_s+s-1}^{l_{sa}+s-k-j_{sa}+1} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +
 \end{aligned}$$

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$$\begin{aligned}
 & \sum_{k=1}^l \sum_{(j_s=1)}^{()} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{sa}+s-i^{l-j_{sa}+1}} \\
 & \sum_{n_i=n+k}^n \sum_{(n_s=n-j)}^{(n_i-j_i-k+1)} \\
 & \frac{(n_i - n_s - k - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i - k + 1)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s - 1)! \cdot (j_i - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{D+l_s+s-n} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_s-n)} \sum_{j_i=j_s+s-1}^{()} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^{s-k})}^{()} \\
 & \frac{(n_{is} + j_s + j_{sa}^s - n_{ik} - n_s - j_i - j_{sa}^{ik} - s - 2 \cdot k)!}{(3 \cdot n_{is} + 2 \cdot j_s - n_{ik} - n_s - j_i - n - j_{sa}^{ik} - 2 \cdot k)!} \cdot \\
 & \frac{1}{(n + j_{sa}^s - j_s - s)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

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$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D \geq n < n \wedge l = k = 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}^i\} \wedge$$

$$s \geq 2 \wedge s = s \Rightarrow$$

$$fz_{j_s, j_i}^{DOSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik})}^{(j_i-s+1)} \sum_{(l_{ik}+s-k-j_{sa}^{ik})}^{(l_{ik}+s-k-j_{sa}^{ik})} \sum_{(n_i=n-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_s=n-j_i+1)}^{(n_{is}+j_s-j_i)}$$

$$\frac{(n_i - n_{is} - 1)!}{(i - j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{D-n+1} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik})}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{(j_i=l_{ik}+s-k-j_{sa}^{ik}+2)}^{l_i-k+1} \sum_{(n_i=n-j_s+1)}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_s=n-j_i+1)}^{n_{is}+j_s-j_i}$$

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$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i - 1)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s + 1)!}{(j_s + l_i - j_i - 1)! \cdot (j_i - j_s + 1)!} \cdot \frac{(n - l_i)!}{(n - l_i - 1)! \cdot (n - j_i)!} \cdot \sum_{k=0}^{l_s + s - n - 1} \binom{()}{(j_s = j_i - k + 1)} \sum_{j_i = l_i + n - D}^{j_{sa}^{ik} + 1} \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{\mathbb{k} = n_{is} + j_{sa}^s - j_{sa}^{ik}}^{()} \sum_{(n_s = n_{ik} + j_s + j_{sa}^{ik} - j_i - j_{sa}^s - \mathbb{k})}^{()} \frac{(2 \cdot n_{ik} + j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - s - 2 \cdot \mathbb{k} - 2 \cdot j_{sa}^s)!}{(n_{ik} + j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - n - 2 \cdot \mathbb{k} - 3 \cdot j_{sa}^s)!} \cdot \frac{1}{(n + j_{sa}^s - s - j_s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

- $D \geq n < n \wedge l_s > D - n + 1 \wedge$
- $2 \leq j_s \leq j_i - s + 1 \wedge$
- $j_s + s - 1 \leq j_i \leq n \wedge$
- $l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$

$$D \geq n < n \wedge I = \mathbb{k} = 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}^i\} \wedge$$

$$s \geq 2 \wedge s = s \Rightarrow$$

$$fz_{j_s, j_i}^{SDOSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_i+n-D-s)} \sum_{l_i-k+1}^{l_i-k+1} \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_i+j_s-j_i} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s - j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{D-n+1} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j_i=j_s+s-1}^{l_i-k+1} \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s - 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+l_s-k+2)}^{(l_{ik}-l_s-k+2)} \sum_{(j_i=j_s+l_s-k)}^{(D-s+1)} \sum_{n_i=n+k}^n \sum_{(n_{is}=n_{is}-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{is}=n_{is}-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{is}=n_{is}-j_s+1)}^{(n_i-j_s+1)} \frac{(n_{ik} + j_{sa}^{ik} - 2 \cdot j_{sa}^{ik} - n_s - j_i - n - s - 2 \cdot k - 2 \cdot j_{sa}^s)!}{(n_{ik} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{sa}^{ik} - n_s - j_i - n - 2 \cdot k - 3 \cdot j_{sa}^s)!} \cdot \frac{1}{(n + j_{sa}^s - s - j_s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s = D - n + 1 \wedge 2 \leq j_s \leq j_s - s + 1 \wedge j_i + s - 1 \leq j_i \leq n \wedge l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge D \geq n < n \wedge I = k = 0 \wedge j_{sa}^s \leq j_{sa}^i - 1 \wedge s: \{j_{sa}^s, j_{sa}^i\} \wedge$$

$$s \geq 2 \wedge s = s \Rightarrow$$

$$f_z S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(j_i-s+1)} \sum_{j_i=l_{ik}+n+s-D-j_{s_a}^{ik}}^{l_s+s-k}$$

$$\sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i + l_i - j_i - s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)} \sum_{j_i=l_s+s-k+1}^{l_{ik}+s-k-j_{s_a}^{ik}+1}$$

$$\sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

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$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_i-s+1)}^{(\)} \sum_{j_i=l_{ik}+n+s-D-j_{sa}^{ik}}^{l_s+s-k}$$

$$\sum_{n_i=n_{i_1}+j_{sa}^{i_1}}^n \sum_{n_{i_2}=n_{i_1}+j_{sa}^{i_2}}^{(j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{is}} \sum_{n_{ik}+j_{sa}^{ik}-j_i-j_{sa}^{ik}=\mathbb{k}}$$

$$\frac{(2 \cdot n_{ik} + j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - s - 2 \cdot \mathbb{k} + j_{sa}^s)!}{(2 \cdot n_{ik} + 2 \cdot j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - s - 2 \cdot \mathbb{k} - 3 \cdot j_{sa}^s)!}$$

$$\frac{1}{(n + j_{sa}^s - s - j_s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D > n < n \wedge n > D - s + 1 \wedge$$

$$2 \leq i_c \leq j_i - s + 1 \wedge$$

$$j_c + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_c \wedge l_{ik} - j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D > n < n \wedge I = \mathbb{k} = 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^i \wedge$$

$$s: \{j_{sa}, j_{sa}^i\} \wedge$$

$$s \geq 2 \wedge s = s \Rightarrow$$

$$fz_{j_s, j_i}^{DOSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_{ik}+n-D-j_{sa}^{ik})} \sum_{j_i=l_{ik}+n+s-D-j_{sa}^{ik}}^{l_{ik}+s-k-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n}^n \sum_{n_{is}=n-j_s+1}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{D-n+1} \sum_{j_i=j_s+1}^{(l_s-k+1)} \sum_{j_i=j_s+1}^{l_{ik}+s-k-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n}^n \sum_{n_{is}=n-j_s+1}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_s-k+1)} \sum_{j_i=j_s+s-1}^{(n_i-j_s+1)} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_{sa}^s-k)} \frac{(2 \cdot n_{ik} + j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - s - 2 \cdot j_{sa}^s)!}{(2 \cdot n_{ik} + 2 \cdot j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - n - 2 \cdot k - j_{sa}^s)!} \cdot \frac{1}{(n+j_s-s-j_s)!} \cdot \frac{(l_s-k)}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \frac{(l-l_i)!}{(D) j_i - n - l_i)! \cdot (n-j_i)!}$$

$$\begin{aligned} & ((D \geq n < n \wedge l_s > D - n + 1 \wedge \\ & 2 \leq j_s \leq j_i - s + 1 \wedge \\ & j_s + s - 1 \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik}) \vee \\ & (D \geq n < n \wedge l_s > D - n + 1 \wedge \\ & 2 \leq j_s \leq j_i - s + 1 \wedge \\ & j_s + s - 1 \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik}) \vee \\ & (D \geq n < n \wedge l_s > D - n + 1 \wedge \\ & 2 \leq j_s \leq j_i - s + 1 \wedge \\ & j_s + s - 1 \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik})) \wedge \\ & D \geq n < n \wedge l = k = 0 \wedge \end{aligned}$$

$$j_{sa}^s \leq j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}^i\} \wedge$$

$$s \geq 2 \wedge s = s \Rightarrow$$

$$fz_{j_s, j_i}^{DOSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(j_i-s+1)} \sum_{j_i=l_i+n}^{l_s+s-k} \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s + j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)} \sum_{j_i=l_s+s-k+1}^{l_i-k+1} \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

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$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_i-s+1)}^{()} \sum_{j_i=n-D}^{l_s+s-k} \sum_{n_i=n}^n \sum_{(n_i=n+k-j_s+1)}^{()} \sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}}^{()} \sum_{(n_{ik}=k+j_s+j_{sa}^{ik}-j_i-j_{sa}^{ik})}^{()} \frac{(2 \cdot n_{ik} + j_{sa}^{ik} + 2 \cdot j_{sa}^{ik} - n_s - s - k - 2 \cdot j_{sa}^s)!}{(2 \cdot n_{ik} + 2 \cdot j_s + j_{sa}^{ik} - n_s - s - k - 3 \cdot j_{sa}^s)!} \cdot \frac{1}{(n + j_{sa}^s - s - j_s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D > n < n \wedge l_s > l_i - n + 1 \wedge 2 \leq j_s \leq j_i - s + 1 \wedge j_s + s - 1 \leq j_i \leq n \wedge l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik}) \vee (D > n < n \wedge l_s > D - n + 1 \wedge 2 \leq j_s \leq j_i - s + 1 \wedge j_s + s - 1 \leq j_i \leq n \wedge l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik}) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} = 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}^i\} \wedge$$

$$s \geq 2 \wedge s = s \Rightarrow$$

$$fz^S_{j_s, j_i}^{DOSD} \sum_{k=1}^{D-n+1} \sum_{(j_s=l_i+n-D-s+1)}^{(l_i+l_s-k-s)} \sum_{j_i=j_s+s-1}^{l_i-k+1} \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{D-n+1} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)} \sum_{j_i=j_s+s-1}^{l_i-k+1} \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i}$$

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$$\begin{aligned}
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_s - 1)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_i - l_s - 1)!}{(j_s + l_i - j_i - 1)! \cdot (j_i - j_s + 1)!} \cdot \\
& \frac{(n - l_i)!}{(n - j_i - 1)! \cdot (n - j_i)!} \cdot \\
& \sum_{k=1}^{l_s + s - n - 1} \sum_{j_s = l_i + k}^{n - s + 1} \sum_{j_i = j_s + s - 1}^n \sum_{n_i = n + \mathbb{k}}^n \sum_{n_{is} = n + \mathbb{k} - j_s + 1}^{(n_i - j_s + 1)} \\
& \sum_{n_s = n_{ik} + j_s + j_{sa}^{ik} - j_i - j_{sa}^s - \mathbb{k}}^{(n_s - j_s + 1)} \sum_{(2 \cdot n_{ik} + j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - s - 2 \cdot \mathbb{k} - 2 \cdot j_{sa}^s)!}^{(2 \cdot n_{ik} + j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - n - 2 \cdot \mathbb{k} - 3 \cdot j_{sa}^s)!} \\
& \frac{1}{(n + j_{sa}^s - s - j_s)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
\end{aligned}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge I = \mathbb{K} = 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}^i\} \wedge$$

$$s \geq 2 \wedge s = s \Rightarrow$$

$$fzS_{j_s, j_i}^{DOSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(j_i-s+1)} \sum_{j_i=l_{sa}+s-k-j_{sa}}^{l_{sa}+s-k-j_{sa}} \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_i+j_s-j_i} \frac{(n_i - n_{is} - 1)!}{(n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_i - n_s - 1)!}{(j_i - n_{is} - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s - j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_{sa}-k-j_{sa}+2)} \sum_{j_i=l_{sa}+s-k-j_{sa}+2}^{l_i-k+1} \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

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$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s - 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_i+l_s-k+1)}^{(j_s+l_s-s-j_i+1)} \sum_{j_i=l_i+n-k}^{(n-l_i-j_s+1)} \sum_{n_i=n+l_k}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \frac{(n_{ik} + j_{sa}^{ik} + 2 \cdot j_{sa}^{ik} - n_s - s - 2 \cdot l_k - 2 \cdot j_{sa}^s)!}{(n_{ik} + 2 \cdot j_s^{ik} + 2 \cdot j_{sa}^{ik} - n_s - j_i - n - 2 \cdot l_k - 3 \cdot j_{sa}^s)!} \cdot \frac{1}{(n + j_{sa}^s - s - j_s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n - 1) \wedge (l_s > D - n + 1) \wedge$$

$$D \geq n < n - 1 \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n - 1 \wedge l = l_k = 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^l - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}^i\} \wedge$$

$$s \geq 2 \wedge s = s \Rightarrow$$

$$fz_{j_s, j_i}^{DOSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_i+n-D-s)} \sum_{j_i=l_i+n-D}^{l_i-k+1} \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + 1 - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{D-n+1} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{sa}-k-j_{sa}+2)} \sum_{j_i=j_s+s-1}^{l_i-k+1} \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

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$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{sa}-k-j_{sa}+2)} \sum_{j_i=j_s+s-}$$

$$\sum_{n_i=n}^n \sum_{=n+j_s+1}^{(j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+} \sum_{=n_{ik}+j_s}^{(j_s+1)}$$

$$\frac{(2 \cdot n_{ik} + j_s + 2 \cdot j_{sa} - n_s - j_i - s - 2 \cdot k - j_{sa}^s)!}{(2 \cdot n_{ik} + 2 \cdot j_s + 2 \cdot j_{sa}^s - n_s - j_i - s - 2 \cdot k - 3 \cdot j_{sa}^s)!}$$

$$\frac{1}{(n + j_{sa}^s - s - j_s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D > n < n \wedge D > D - s + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 \leq l_s \wedge l_{ik} - j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D > n \wedge I = k = 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^l \wedge$$

$$s \in \{j_{sa}, j_{sa}^s\} \wedge$$

$$s \geq 2 \wedge s = s \Rightarrow$$

$$fz_{j_s, j_i}^{DOSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(j_i-s+1)} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{ik}+s-k-j_{sa}^{ik}+1}$$

$$\begin{aligned}
 & \sum_{n_i=n}^n \sum_{n_{is}=n-j_s+1}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{l_i+1} \sum_{j_{sa}+1}^{(l_{ik-k}+2)} \sum_{j_i=l_{ik}+s-k-j_{sa}+1}^{l_{sa}+s-k-j_{sa}+1} \\
 & \sum_{n_i=n}^n \sum_{n_{is}=n-j_s+1}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -
 \end{aligned}$$

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$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_i-s+1)}^{(\quad)} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{ik}+s-k-j_{sa}^{ik}+1} \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}-j_{sa}^{ik}}^{(\quad)} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_{sa}-l_k)}^{(\quad)} \frac{(2 \cdot n_{ik} + j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - s - \dots - 2 \cdot j_{sa}^s)!}{(2 \cdot n_{ik} + 2 \cdot j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - \dots - 2 \cdot l_k - \dots - j_{sa}^s)!} \cdot \frac{1}{(n + \dots - s - j_s)!} \cdot \frac{(l_s - k - \dots)}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > D - n + \dots \wedge$

$2 \leq j_s \leq j_i - s + 1 \wedge$

$j_s + s - 1 \leq j_i \leq \dots \wedge$

$l_{sa} - j_{sa}^{ik} + \dots = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{sa} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$D \geq n < n \wedge I = \dots = 0 \wedge$

$j_{sa}^s \leq \dots - 1 \wedge$

$s: \{j_{sa}^s, j_{sa}^i\}$

$s > \dots = s \Rightarrow$

$$f_z^{SDOSD}_{j_s, j_i} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_{sa}+n-D-j_{sa})} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{sa}+s-k-j_{sa}+1} \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(n - l_i)!}{(n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D-l_i} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_{ik}-j_{sa}^k+2)} \sum_{j_i=j_s+s-1}^{j_{sa}+1}$$

$$\sum_{n=(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_{ik}-k-j_{sa}^k+2)} \sum_{j_i=j_s+s-1}^{j_{sa}+1}$$

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$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s)}^{()}$$

$$\frac{(2 \cdot n_{ik} + j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - s - 2 \cdot \mathbb{k} - 2 \cdot j_{sa}^s)}{(2 \cdot n_{ik} + 2 \cdot j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - n - 2 \cdot \mathbb{k} - 3 \cdot j_{sa}^s)}$$

$$\frac{(n - s - j_s)!}{(n - k - 1)!}$$

$$\frac{(n - j_s - n - 1)! \cdot (j_s - 2)!}{(D - n - l_i) \cdot (n - j_i)!}$$

$((D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq j_s \leq j_i - s + 1 \wedge$

$j_s + s - 1 \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$

$(D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq j_s \leq j_i - s + 1 \wedge$

$j_s + s - 1 \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$

$(D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq j_s \leq j_i - s + 1 \wedge$

$j_s + s - 1 \leq j_i \leq n \wedge$

$(l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa})) \wedge$

$D \geq n < n \wedge l = \mathbb{k} = 0 \wedge$

$j_{sa}^s \leq j_{sa}^l - 1 \wedge$

$s: \{j_{sa}^s, j_{sa}^l\} \wedge$

$$s \geq 2 \wedge s = s \Rightarrow$$

$$fz_{j_s, j_i}^{DOSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(j_i-s+1)} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_s+s-k} \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i}^{n_{is}+j_s-j_i} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_s - l_s - s + 1)!}{(l_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)} \sum_{j_i=l_s+s-k+1}^{l_{sa}+s-k-j_{sa}+1} \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

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$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_i-s+1)}^{()} \sum_{j_i=l_{sa}+n+s-D-j_s}^{l_s+s-k}$$

$$\sum_{n_i=n}^n \sum_{=n+j_s+1}^{(j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s} \sum_{=n_{ik}+j_s}^{()} \sum_{=j_i-j_{sa}^{ik}}^{()}$$

$$\frac{(2 \cdot n_{ik} + j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - s - 2 \cdot k) \cdot (j_{sa}^s)!}{(2 \cdot n_{ik} + 2 \cdot j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - s - 2 \cdot k - 3 \cdot j_{sa}^s)!}$$

$$\frac{1}{(n + j_{sa}^s - s - j_s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \wedge$$

$$D \geq n < n \wedge I = \mathbb{K} = 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}^i\} \wedge$$

$$s \geq 2 \wedge s = s \Rightarrow$$

$$f_z S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{D-n+1} \sum_{j_s=l_s+n-k}^{(l_{sa}+n-D-j_{sa})} \sum_{j_i=l_{sa}+n+s-k}^{(l_{sa}+s-k-j_{sa}+1)} \frac{\sum_{n_i=n}^n \sum_{n_{is}=n-j_s+1}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i}}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(j_s-n_s-1)!}{(j_s-j_s-1)! \cdot (n_{is}+j_s-n_s-j_i)!} \cdot \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \frac{(l_i-l_s-s+1)!}{(j_s+l_i-j_i-l_s)! \cdot (j_i-j_s-s+1)!} \cdot \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \sum_{k=1}^{D-n+1} \sum_{j_s=l_{sa}+n-D-j_{sa}+1}^{(l_s-k-1)} \sum_{j_i=j_s+s-1}^{l_{sa}+s-k-j_{sa}+1} \sum_{n_i=n}^n \sum_{n_{is}=n-j_s+1}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!}$$

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$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(l_i)!}{(D + j_i - n - l_i)! \cdot (j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{l_{sa}+n_{is}+j_s = j_s+s-1}^{(l_s-k-1)} \sum_{n_i=n+1}^n \sum_{n_{is}=n+k-j_s+1}^{(n_i-j_s+1)} \sum_{\substack{(\cdot) \\ n_{ik}=n_{is}+j_{sa}-j_{sa}^{ik} \\ (n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^{-k})}} \frac{(2 \cdot n_{ik} + j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - s - 2 \cdot k - 2 \cdot j_{sa}^s)!}{(2 \cdot n_{ik} + 2 \cdot j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - n - 2 \cdot k - 3 \cdot j_{sa}^s)!} \cdot \frac{1}{(n + j_{sa}^s - s - j_s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$l_i \leq D + s - n \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} = 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}^i\} \wedge$$

$$s \geq 2 \wedge s = s \Rightarrow$$

$$fz_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i^{l-1} (j_i - s + 1) l_{ik} + s - k - j_{sa}^{ik}} \sum_{(j_s=2)} \sum_{j_i=s+1} \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)} \sum_{n_s=n-j_i+1}^{(n_i - j_s - 1)} \frac{(n_i - j_s - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_i - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s - j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{i^{l-1} (l_{ik} - k - j_{sa}^{ik} + 2)} \sum_{(j_s=2)} \sum_{j_i=l_{ik} + s - k - j_{sa}^{ik} + 2}^{l_i - k + 1} \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)} \sum_{n_s=n-j_i+1}^{(n_i - j_s + 1)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

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$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s - 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{j_i=1}^{l_i} \binom{l_i}{j_i} j_i^{l_i+1}$$

$$\sum_{n_i=n}^{n_i-j_i+1} \binom{n_i-j_i+1}{n_i-j_i+1}$$

$$\frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$\sum_{k=1}^{l_i-1} \sum_{(j_s=j_i-s+1)}^{()} \sum_{j_i=s+1}^{l_{ik}+s-k-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-\mathbb{k})}^{()}$$

$$\frac{(2 \cdot n_{ik} + j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - s - 2 \cdot \mathbb{k} - 2 \cdot j_{sa}^s)!}{(2 \cdot n_{ik} + 2 \cdot j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - n - 2 \cdot \mathbb{k} - 3 \cdot j_{sa}^s)!}$$

$$\frac{1}{(n + j_{sa}^s - s - j_s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - \dots)}$$

$$\sum_{k=i}^{(\dots)} \sum_{j_i=s}^{(\dots)}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{ik}=n_{is}-j_{sa}^{ik})}^{(\dots)} \sum_{n_s=n_{ik}+j_{sa}^{ik}-j_i-j_{sa}^s}$$

$$\frac{(2 \cdot n_{ik} + j_s + 2 \cdot \dots - n_s - j_i - \dots)!}{(2 \cdot n_{ik} + 2 \cdot j_s + 2 \cdot \dots - n - 2 \cdot \dots - 3 \cdot j_{sa}^s) \cdot (n - s)!} \cdot \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l_i \leq D - n + 1$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - \dots + 1 = l_s + \dots + j_{sa}^{ik} - s > l_{ik}$$

$$D \geq n < n \wedge \dots = 0$$

$$j_{sa}^s = j_{sa}^i - 1 \wedge$$

$$\{j_{sa}^s, j_{sa}^i\} \wedge$$

$$s \geq 2 \wedge s = s$$

$$fz_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j_i=j_s+s-1}^{l_i-k+1} \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!} \cdot$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot$$

$$\frac{(l_i)!}{(D + j_i - n - l_i)! \cdot (j_i)!} +$$

$$\sum_{k=1}^{i-1} \sum_{j_i=s}^{l_i-i+k} \binom{l_i-i+k}{j_i}$$

$$\sum_{n_i=n}^n \sum_{(n_s=n-j_i+1)}^{(n_i-j_i+1)}$$

$$\frac{(n_i - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_i - n_s - j_i + 1)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - j_s - s)!} \cdot$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!} \cdot$$

$$\sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j_i=j_s+s-1}^{(l_{ik}-k-j_{sa}^{ik}+2)}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-k)}^{(n_{ik}-k-j_{sa}^{ik}+2)}$$

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$$\frac{(2 \cdot n_{ik} + j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - s - 2 \cdot k - 2 \cdot j_{sa}^s)!}{(2 \cdot n_{ik} + 2 \cdot j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - n - 2 \cdot k - 3 \cdot j_{sa}^s)!}$$

$$\frac{1}{(n + j_{sa}^s - s - j_s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{j_s} \sum_{l=1}^{(j_s=1)} \sum_{j_i}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{ik} + j_s - j_{sa}^{ik} - n_s - j_i - s - 2 \cdot k - 2 \cdot j_{sa}^s) = (n_{ik} + j_s + j_{sa}^{ik} - j_i - j_{sa}^s - k)}$$

$$\frac{(2 \cdot n_{ik} + j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - s - 2 \cdot k - 2 \cdot j_{sa}^s)!}{(2 \cdot n_{ik} + 2 \cdot j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - n - 2 \cdot k - 3 \cdot j_{sa}^s)! \cdot (n - s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1$$

$$1 \leq j \leq j_i - s + 1$$

$$j_i - s - 1 \leq j \leq n \wedge$$

$$l_{ik} + j_{sa}^{ik} + 1 = l_s + j_{sa}^{ik} + j_{sa}^{ik} \wedge$$

$$D + s - 1 < l_i \leq D + j_i + s - n - 1 \wedge$$

$$D \geq n < n \wedge k = 1 \wedge$$

$$j_{sa}^s \neq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}^{ik}\}$$

$$s \geq 2 \wedge s = s \Rightarrow$$

$$fz_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i^{l-1} (j_i - s + 1)} \sum_{(j_s=2)}^{l_{ik} + s - k - j_{sa}^{ik} + 1} \sum_{j_i=l_i+n-D}$$

$$\begin{aligned}
 & \sum_{n_i=n}^n \sum_{n_{is}=n-j_s+1}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=2}^{l_i-1} \sum_{j_i=l_{ik}+s-k-j_{sa}^{ik}+2}^{(l_{ik}-j_{sa}^{ik}+2)} \sum_{j_i=l_{ik}+s-k-j_{sa}^{ik}+2}^{l_i-k+1} \\
 & \sum_{n_i=n}^n \sum_{n_{is}=n-j_s+1}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +
 \end{aligned}$$

GÜLDENWA

$$\begin{aligned}
 & \sum_{k=1}^{l_i} \sum_{(j_s=1)}^{()} \sum_{j_i=l_i+n-D}^{l_i-i^{l+1}} \\
 & \sum_{n_i=n}^n \sum_{(n_s=n-j)}^{(n_i-j_i+1)} \\
 & \frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n_s - j_i)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s - 1)! \cdot (j_i - s)!} \cdot \\
 & \frac{(n - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{D+l_s+s-l_i} \sum_{(j_i=j_i-s+1)}^{()} \sum_{j_i=l_i+n-D}^{l_{ik}+s-k-j_{sa}^{ik}+1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{()} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-k)}^{()} \\
 & \frac{(2 \cdot n_{ik} + j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - s - 2 \cdot k - 2 \cdot j_{sa}^s)!}{(2 \cdot n_{ik} + 2 \cdot j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - n - 2 \cdot k - 3 \cdot j_{sa}^s)!} \cdot \\
 & \frac{1}{(n + j_{sa}^s - s - j_s)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} = 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}^i\} \wedge$$

$$s \geq 2 \wedge s = s \Rightarrow$$

$$fz_{j_s, j_i}^{DOSD} = \sum_{k=1}^{l_s} \sum_{(j_s - k)}^{(l_i + n - D - s) - k + 1} \sum_{j_i = l_i + n - D}^{(j_s - k) + 1} \sum_{n_i = n}^{(n_i - j_s + 1)} \sum_{n_s = n - j_i + 1}^{n_s + j_s - j_i} \frac{(n_i - n_s - 1)!}{(j_s - k)! \cdot (n_i - n_s - j_s + 1)!} \cdot \frac{(n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_s + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{i-1} \sum_{(j_s = l_i + n - D - s + 1)}^{(l_{ik} - k - j_{sa}^{ik} + 2)} \sum_{j_i = j_s + s - 1}^{l_i - k + 1} \sum_{n_i = n}^n \sum_{(n_i = n - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_s = n - j_i + 1}^{n_s + j_s - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - 1)!}{(j_s + l_i - j_i - 1)! \cdot (j_i - j_s + 1)!}$$

$$\frac{(n - l_i)!}{(n - l_i - 1)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{l+1} \sum_{j_s=1}^{n-l+1} \sum_{j_i=l_i+n-D}$$

$$\sum_{n_i=n}^n \sum_{(n_s=n-j_i+1)}^{(n_i-j_i+1)}$$

$$\frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{ik}-k-j_{s\bar{a}}^{ik}+2)} \sum_{j_i=j_s+s-1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}$$

GÜLDÜMNA

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-k)}$$

$$\frac{(2 \cdot n_{ik} + j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - s - 2 \cdot k - 2 \cdot j_{sa}^s)!}{(2 \cdot n_{ik} + 2 \cdot j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - n - 2 \cdot k - 3 \cdot j_{sa}^s)!}$$

$$\frac{1}{(n + j_{sa}^s - s - j_s^s)}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)}{(D + j_i - n - l_i)! \cdot (n - j_i)}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n$$

$$D \geq n < n \wedge I = k = 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}^i\} \wedge$$

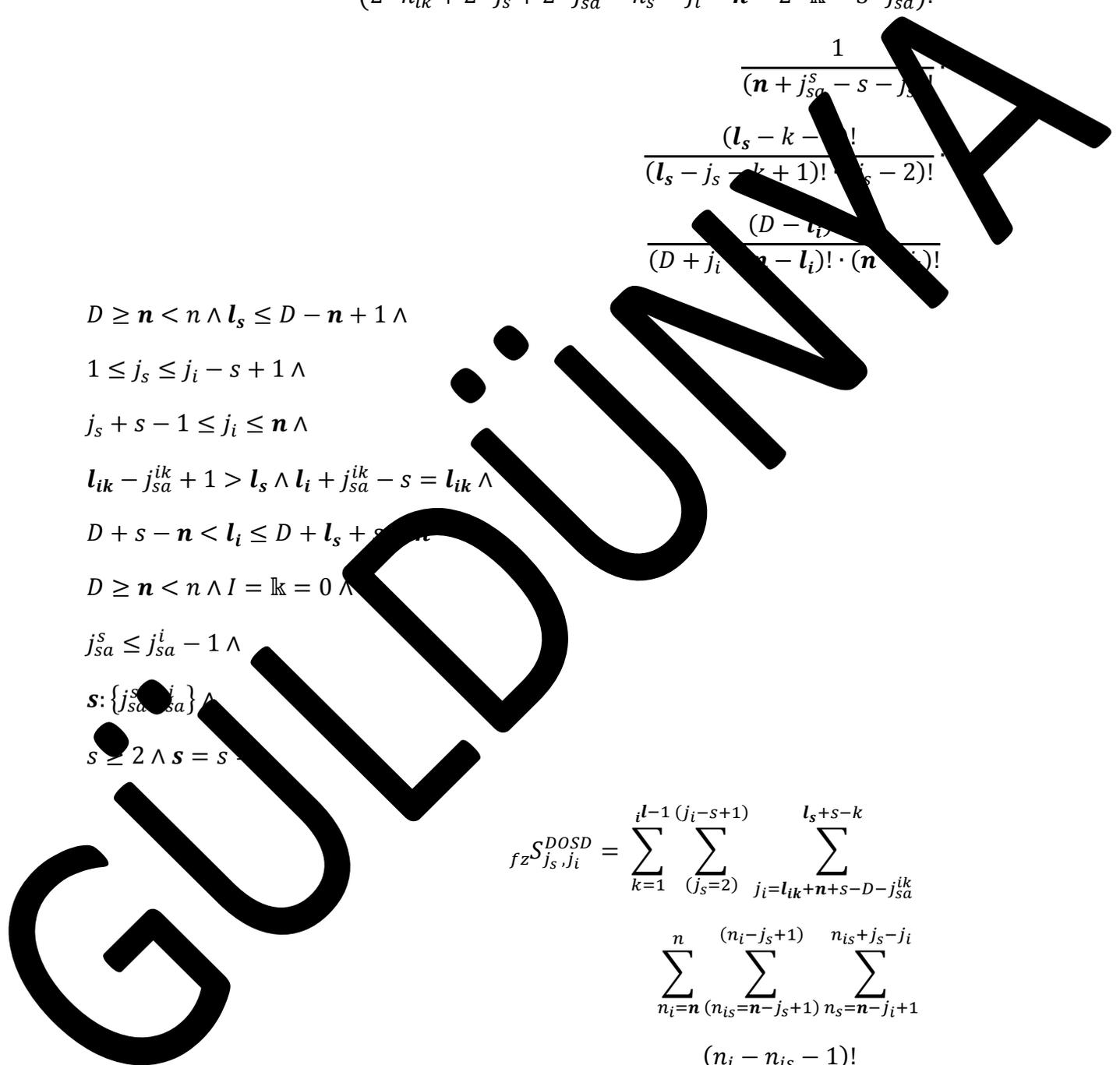
$$s \geq 2 \wedge s = s - 1$$

$$fz_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(j_i-s+1)} \sum_{j_i=l_{ik}+n+s-D-j_{sa}^{ik}}^{l_s+s-k}$$

$$\sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$



$$\begin{aligned}
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{i^{l-1}} \sum_{(j_s=1)}^{(l_s - l_i + s - j_i - j_s + 1)^{ik+1}} \sum_{j_i=l_{ik}+n+s-D-j_s^{ik}}^{(n_i - j_s - j_i + 1)^{n_{is}+j_s-j_i}} \\
 & \frac{(n_i - j_s - j_i + 1)^{n_{is}+j_s-j_i}}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_s - n_s - 1)!}{(j_i - 2)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{i^l} \sum_{(j_s=1)}^{l_{ik}+s-i^l-j_s^{ik}+1} \sum_{j_i=l_{ik}+n+s-D-j_s^{ik}}^{(n_i - j_i + 1)^{n_{is}+j_s-j_i}} \\
 & \frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!} \cdot
 \end{aligned}$$

GÜLDÜZYAN

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_i-s+1)}^{()} \sum_{j_i=l_{ik}+n-l_s-k}^{l_s+s-k} D-j_{sa}^{ik}$$

$$\sum_{n_i=n}^n \sum_{n_{is}=n+l_k-j_s+1}^{()}$$

$$\sum_{n_{ik}=n_{is}}^{()} \sum_{j_{sa}^{ik}=(n_{is}+j_s+j_{sa}^{ik}-j_i-j_{sa}^{lk})}^{()}$$

$$\frac{(2 \cdot n_{ik} + j_s - 2 \cdot j_{sa}^{ik} - n_s - s - l_k - 2 \cdot j_{sa}^s)!}{(2 \cdot n_{ik} + 2 \cdot j_s + j_{sa}^{ik} - n_s - n - 2 \cdot l_k - 3 \cdot j_{sa}^s)!}$$

$$\frac{1}{(n + j_{sa}^s - s - j_s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_s + 1 \wedge$$

$$j_s + 1 \leq j_i \leq n \wedge$$

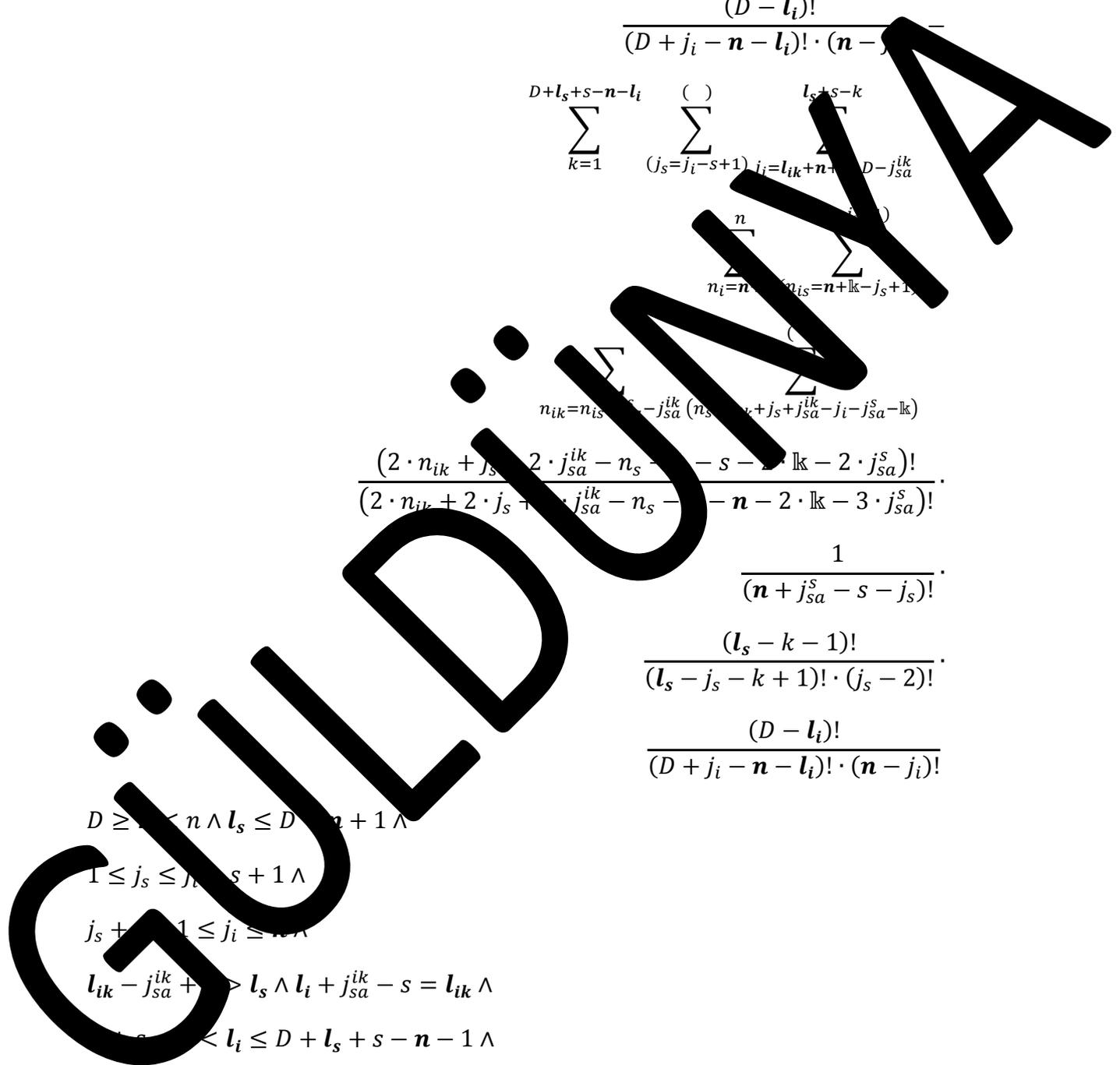
$$l_{ik} - j_{sa}^{ik} + l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge I = l_k = 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}^i\} \wedge$$



$$s \geq 2 \wedge s = s \Rightarrow$$

$$fz S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(l_{ik}+n-D-j_{sa}^{ik})} l_{ik+s-k-j_{sa}^{ik}+1} \sum_{j_i=l_{ik}+n+s-D-j_{sa}^{ik}}^{(n_i-j_s+1)} \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i + l_s - s + 1)!}{(l_i + l_s - s + 1)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{i-1} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_s-k+1)} l_{ik+s-k-j_{sa}^{ik}+1} \sum_{j_i=j_s+s-1}^{(n_i-j_s+1)} \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

GÜLDÜZYA

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{l_i} \sum_{(j_s=1)}^{l_{ik}+s-i-l-j_{sa}^{ik}+1} \sum_{j_i=l_{ik}+n+s-D-j_{sa}^{ik}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_i=n+k-j_i+1)}^{n-j_i+1}$$

$$\frac{(n_s - n_s - 1)!}{(i - 2)! \cdot (n_s - j_i + 1)!}$$

$$\frac{(n_s - n - 1)!}{(n - j_i)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

$$\sum_{k=1}^{D+l_s+n-l_i} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_s-k+1)} \sum_{j_i=j_s+s-1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_i=n+k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-k)}^{()}$$

$$\frac{(2 \cdot n_{ik} + j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - s - 2 \cdot k - 2 \cdot j_{sa}^s)!}{(2 \cdot n_{ik} + 2 \cdot j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - n - 2 \cdot k - 3 \cdot j_{sa}^s)!}$$

$$\frac{1}{(n + j_{sa}^s - s - j_s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

GÜLDENMYA

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$l_i \leq D + s - n) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} = 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^i - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, j_{sa}^i\} \wedge$$

$$s \geq 2 \wedge \mathbf{s} = s \Rightarrow$$

$$\begin{aligned}
 f_z S_{j_s, j_i}^{DOSD} &= \sum_{k=1}^{i^{l-1} (j_i - s + 1)} \sum_{(j_s=2)}^{l_s + s - k} \sum_{j_i = s + 1} \\
 &\sum_{n_i = n}^n \sum_{(n_{is} = n - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_s = n - j_i + 1}^{n_{is} + j_s - j_i} \\
 &\frac{(n_i - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} + 1)!} \cdot \\
 &\frac{(n_{is} - 1)!}{(j_i - 1)! \cdot (n_{is} - n_s - j_i)!} \cdot \\
 &\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 &\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 &\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 &\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 &\sum_{k=1}^{i^{l-1} (l_s - k + 1)} \sum_{(j_s=2)}^{l_i - k + 1} \sum_{j_i = l_s + s - k + 1} \\
 &\sum_{n_i = n}^n \sum_{(n_{is} = n - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_s = n - j_i + 1}^{n_{is} + j_s - j_i} \\
 &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 &\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 &\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}
 \end{aligned}$$

$$\begin{aligned}
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - \dots)!} + \\
 & \sum_{j_s=1}^{(l_i - l_s + 1)} \sum_{l_i=s}^{(l_i - l_s + 1)} \sum_{n_s=n-j_i+1}^n \dots \\
 & \frac{(n_i - n_s - j_i + 1)!}{(j_i - n_s - 1)! \cdot (n_i - n_s - j_i + 1)!} \cdot \\
 & \frac{(n_s - j_i - n - 1)! \cdot (n - j_i)!}{(l_i - l_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!} - \\
 & \sum_{k=1}^{i-1} \sum_{(j_s=j_i-s+1)}^{()} \sum_{j_i=s+1}^{l_s+s-k} \dots \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \dots \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s - j_{sa}^{ik}}^{()} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik} - j_i - j_{sa}^s - \mathbb{k})}^{()} \dots \\
 & \frac{(2 \cdot n_{ik} + j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - s - 2 \cdot \mathbb{k} - 2 \cdot j_{sa}^s)!}{(2 \cdot n_{ik} + 2 \cdot j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - n - 2 \cdot \mathbb{k} - 3 \cdot j_{sa}^s)!} \cdot \\
 & \frac{1}{(n + j_{sa}^s - s - j_s)!} \cdot
 \end{aligned}$$

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$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^n \sum_{(j_s=1)}^{(\cdot)} \sum_{j_i=1}^{(\cdot)} \sum_{n_i=n+k}^n \sum_{(n_{ik}=n_i-j_s-j_{sa}^{ik})}^{(\cdot)} \sum_{n_s=n_{ik}+j_s-j_{sa}^{ik}-k}^{(\cdot)} \frac{(2 \cdot n_{ik} + j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - s - 2 \cdot j_{sa}^s)!}{(2 \cdot n_{ik} + 2 \cdot j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - 2 \cdot k - 3 \cdot j_{sa}^s)! \cdot (n - s)!} \cdot \frac{(D - n - l_i)! \cdot (n - s)!}{(D - n - l_i)! \cdot (n - s)!}$$

- $((D \geq n < n \wedge l_s \leq D - n + 1 \wedge$
- $1 \leq j_s \leq j_i - s + 1 \wedge$
- $j_s + s - 1 \leq j_i \leq n \wedge$
- $l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$
- $l_i \leq D + s - n) \vee$
- $((D \geq n < n \wedge l_s \leq D - n + 1 \wedge$
- $1 \leq j_s \leq j_i - s + 1 \wedge$
- $j_s + s - 1 \leq j_i \leq n \wedge$
- $l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$
- $l_i \leq D + s - n) \vee$
- $((D \geq n < n \wedge l_s \leq D - n + 1 \wedge$
- $1 \leq j_s \leq j_i - s + 1 \wedge$
- $j_s + s - 1 \leq j_i \leq n \wedge$
- $l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$
- $l_i \leq D + s - n) \vee$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$(l_i \leq D + s - n) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} = 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}^i\} \wedge$$

$$s \geq 2 \wedge s = s \Rightarrow$$

$$\begin{aligned}
 & \sum_{j_s, j_i}^{DOS} \sum_{(j_s=2)}^{l_s-k} \sum_{j_i=j_s+s-1}^{l_i-k+1} \\
 & \sum_{n_i}^{n_i} \sum_{(n_{is}=n-j_s+1)}^{(n_i-1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +
 \end{aligned}$$

$$\sum_{k=i}^{()} \sum_{(j_s=1)}^{l_i - i + 1} \sum_{j_i=s}$$

$$\sum_{n_i=n}^n \sum_{(n_s=n-j_i+1)}^{(n_i-j_i+1)}$$

$$\frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_i - l_s - s - 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!}$$

$$\frac{(D - l_i)!}{(D + s - l_i - 1)! \cdot (n - l_i)!}$$

$$\sum_{l=1}^{l-1} \sum_{(j_s=2)}^{(l_s-1)} \sum_{j_s+s-1}$$

$$\sum_{n_i=n+l_k} \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{is}=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^{ik}}^{()} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^{ik}-l_k)}^{()}$$

$$\frac{(2 \cdot n_{ik} + j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - s - 2 \cdot l_k - 2 \cdot j_{sa}^s)!}{(2 \cdot n_{ik} + 2 \cdot j_{sa}^{ik} - n_s - j_i - n - 2 \cdot l_k - 3 \cdot j_{sa}^s)!}$$

$$\frac{1}{(n + j_{sa}^s - s - j_s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l}^{()} \sum_{(j_s=1)} \sum_{j_i=s}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n_i-j_s-j_{sa}^{ik})}^{()} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^{ik}-l_k)}$$

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$$\frac{(2 \cdot n_{ik} + j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - s - 2 \cdot \mathbb{k} - 2 \cdot j_{sa}^s)!}{(2 \cdot n_{ik} + 2 \cdot j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - n - 2 \cdot \mathbb{k} - 3 \cdot j_{sa}^s)! \cdot (n - s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$((D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_i - s + 1 = l_s \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} = 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^l - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}^l\} \wedge$$

$$s \geq 2 \wedge s = s \Rightarrow$$

$$fzS_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i^{l-1} (j_i - s + 1)} \sum_{(j_s=2)}^{l_s + s - k} \sum_{j_i = l_i + n - D}^{n} \sum_{(n_{is} = n - j_s + 1)}^{(n_i - j_s + 1)} \sum_{(n_s = n - j_i + 1)}^{n_{is} + j_s - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{i^{l-1} (l_s - k + 1)} \sum_{(j_s=2)}^{l_i - k + 1} \sum_{j_i = l_s + s - k + 1}^{n} \sum_{(n_{is} = n - j_s + 1)}^{(n_i - j_s + 1)} \sum_{(n_s = n - j_i + 1)}^{n_{is} + j_s - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{l_i} \sum_{(j_s=1)}^{l_i - i + 1} \sum_{j_i=l_i+n-l_s}^{l_i - i + 1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_i=n+l_k-j_s+1)}^{n - j_i + 1}$$

$$\frac{(n_i - n_s - 1)!}{(i - 2)! \cdot (n_i - n_s - j_i + 1)!} \cdot$$

$$\frac{(n_s - i - n - 1)!}{(n - j_i)!} \cdot$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_i-s+1)}^{l_s+s-k} \sum_{j_i=l_i+n-D}^{l_s+s-k}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_i=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-l_k)}$$

$$\frac{(2 \cdot n_{ik} + j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - s - 2 \cdot l_k - 2 \cdot j_{sa}^s)!}{(2 \cdot n_{ik} + 2 \cdot j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - n - 2 \cdot l_k - 3 \cdot j_{sa}^s)!} \cdot$$

$$\frac{1}{(n + j_{sa}^s - s - j_s)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

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$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \wedge$$

$$D \geq n < n \wedge l = k = 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^l - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}^l\} \wedge$$

$$s \geq 2 \wedge s = s \Rightarrow$$

$$\begin{aligned}
fz_{j_s, j_i}^{DOSD} &= \sum_{k=1}^{i^{l-1}} \sum_{(j_s=2)}^{(l_i+n-D-s)} \sum_{j_i=l_i+n-D}^{l_i-k+1} \\
&\sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i}^{n_{is}+j_s-j_i} \\
&\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
&\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
&\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
&\frac{(l_s - j_s - k + 1)!}{(l_s - j_s - 2)!} \cdot \\
&\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
&\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!} + \\
&\sum_{k=1}^{i^{l-1}} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)} \sum_{j_i=j_s+s-1}^{l_i-k+1} \\
&\sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \\
&\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
&\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
&\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
&\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
&\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot
\end{aligned}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{l_i} \sum_{j_s=1}^{l_i - k} \sum_{j_i=l_i+n-D}^{l_i - k + 1}$$

$$\sum_{n_i=n}^n \sum_{n_i=n-j_i+1}^{n_i-j_i+1}$$

$$\frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - j_i + 1)!} \cdot$$

$$\frac{(n_i - 1)!}{(n_i + j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_i - j_s - 1)!}{(l_i - j_s - l_s + 1)! \cdot (j_i - s)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

$$\sum_{k=1}^{l_s+s-n-l_i} \sum_{j_s=l_i+n-D-s+1}^{l_s-k+1} \sum_{j_i=j_s+s-1}$$

$$\sum_{n_i=n+k}^n \sum_{n_i=n+k-j_s+1}^{n_i-j_s+1}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^{ik}}^{l_i-k}$$

$$\frac{(2 \cdot n_{ik} + j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - s - 2 \cdot k - 2 \cdot j_{sa}^s)!}{(2 \cdot n_{ik} + 2 \cdot j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - n - 2 \cdot k - 3 \cdot j_{sa}^s)!} \cdot$$

$$\frac{1}{(n + j_{sa}^s - s - j_s)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = k = 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}^i\} \wedge$$

$$s \geq 2 \wedge s = s \Rightarrow$$

$$fz S_{j_s, j_i}^{DOS} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(j_i-s+1)} \sum_{j_i=l_{sa}+s-k-j_{sa}+2}^{l_i-k+1} \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \frac{(n_i - n_{is} - 1)!}{(i - l - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(l_{sa}-k-j_{sa}+2)} \sum_{j_i=l_{sa}+s-k-j_{sa}+2}^{l_i-k+1} \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i}$$

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$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - s + 1)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(n - l_i)!}{(n - l_i - 1)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{l_s} \sum_{j_s=1}^{l_s-k} \sum_{j_i=l_i+n-D}^{l_s-k-j_s+1}$$

$$\sum_{n_i=n}^n \sum_{n_s=n-j_i+1}^{(n_i-j_i+1)}$$

$$\frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_i-s+1)}^{()} \sum_{j_i=l_i+n-D}^{l_{sa}+s-k-j_{sa}+1}$$

$$\sum_{n_i=n+k}^n \sum_{n_{is}=n+k-j_s+1}^{(n_i-j_s+1)}$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-k)}^{()}$$

$$\frac{(2 \cdot n_{ik} + j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - s - 2 \cdot k - 2 \cdot j_{sa}^s)!}{(2 \cdot n_{ik} + 2 \cdot j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - n - 2 \cdot k - 3 \cdot j_{sa}^s)!}$$

$$\frac{1}{(n + j_{sa}^s - s - j_s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} - j_{sa}^{ik} + j_{sa} - s > j_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n \wedge$$

$$D \geq n < n \wedge l = k = 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}^i\} \wedge$$

$$s \geq 2 \wedge s = s - 1$$

$$fz S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(l_i+n-D-s)} \sum_{j_i=l_i+n-D}^{l_i-k+1} \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\begin{aligned}
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{i-1} \sum_{(j_s=l_i+k-1) \dots (j_s=l_i+k-1)}^{(l_{sa}-k-1) \dots (l_{sa}-k-1)} \sum_{(j_i=j_s+k) \dots (j_i=j_s+k)}^{(l_{sa}-k+1) \dots (l_{sa}-k+1)} \cdot \\
 & \sum_{n_i=n}^{(n_i-j_s) \dots (n_i-j_s)} \sum_{(n_{is}=n-j_s+1) \dots (n_{is}=n-j_s+1)}^{(n_{is}+j_s-j_i) \dots (n_{is}+j_s-j_i)} \cdot \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_s - n_s - 1)!}{(j_i - 2)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{i-1} \sum_{(j_s=1) \dots (j_s=1)}^{() \dots ()} \sum_{(j_i=l_i+n-D) \dots (j_i=l_i+n-D)}^{l_i - i + 1} \cdot \\
 & \sum_{n_i=n}^n \sum_{(n_s=n-j_i+1) \dots (n_s=n-j_i+1)}^{(n_i-j_i+1) \dots (n_i-j_i+1)} \cdot \\
 & \frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!} \cdot
 \end{aligned}$$

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$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{sa}-k-j_{sa}+2)} \sum_{j_{sa}^s+s-1}$$

$$\sum_{n_i=n}^n \sum_{(n_{is}=n+k-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}^s - j_{sa}^{ik} (n_{is}^s + j_s + j_{sa}^{ik} - j_i - j_{sa}^s - k)}$$

$$\frac{(2 \cdot n_{ik} + j_{sa}^s + 2 \cdot j_{sa}^{ik} - n_s - s - k - 2 \cdot j_{sa}^s)!}{(2 \cdot n_{ik} + 2 \cdot j_{sa}^s + j_{sa}^{ik} - n_s - s - n - 2 \cdot k - 3 \cdot j_{sa}^s)!}$$

$$\frac{1}{(n + j_{sa}^s - s - j_s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D + n + 1 \wedge$$

$$1 \leq j_s \leq j_{sa}^s + 1 \wedge$$

$$j_s + 1 \leq j_i =$$

$$l_{ik} - j_{sa}^{ik} + j_{sa}^s = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa}^s > l_{ik} \wedge l_i + j_{sa}^s - s = l_{sa} \wedge$$

$$l_s - s < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge I = k = 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}^i\} \wedge$$

$$s \geq 2 \wedge s = s \Rightarrow$$

$$\begin{aligned}
 f_z S_{j_s, j_i}^{DOSD} &= \sum_{k=1}^{i l-1} \sum_{(j_s=2)}^{(j_i-s+1)} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{ik}+s-k-j_{sa}^{ik}+1} \\
 &\quad \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \\
 &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \\
 &\quad \frac{(n_i - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \\
 &\quad \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 &\quad \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \\
 &\quad \frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \\
 &\quad \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 &\quad \sum_{k=1}^{i l-1} \sum_{(j_s=2)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j_i=l_{ik}+s-k-j_{sa}^{ik}+2}^{l_{sa}+s-k-j_{sa}+1} \\
 &\quad \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \\
 &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \\
 &\quad \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \\
 &\quad \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 &\quad \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}
 \end{aligned}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=i}^n \sum_{(j_s=1)}^{l_{sa}+s-i} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_i+1)}$$

$$\frac{(n_i - n_s - 1)!}{(i - 2)! \cdot (n_i - n_s - j_i + 1)!}$$

$$\frac{(n_s - i - n - 1)!}{(n - j_i)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

$$\sum_{k=1}^{D+l_s+n-l_i} \sum_{(j_s=j_i-s+1)}^{(l_{ik}+s-k-j_{sa}^{ik}+1)} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^{ik}-k)}$$

$$\frac{(2 \cdot n_{ik} + j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - s - 2 \cdot k - 2 \cdot j_{sa}^s)!}{(2 \cdot n_{ik} + 2 \cdot j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - n - 2 \cdot k - 3 \cdot j_{sa}^s)!}$$

$$\frac{1}{(n + j_{sa}^s - s - j_s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge I = \mathbb{K} = 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}^i\} \wedge$$

$$s \geq 2 \wedge s = s \Rightarrow$$

$$fz_{j_s}^{QSD} = \sum_{k=1}^{i-l_s} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{+n-D-j_{sa}} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{sa}+s-k-j_{sa}+1} \sum_{n_i=n}^{(n_i-j_s+1)} \sum_{(n_{is}=n-j_s+1)}^{n_{is}+j_s-j_i} \sum_{n_s=n-j_i+1}^{(n_i-j_s+1)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\begin{aligned}
 & \sum_{k=1}^{i^l-1} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_{ik-k-j_{sa}^k}+2)} \sum_{j_i=j_s+s-1}^{l_{sa+s-k-j_{sa}+1}} \\
 & \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i}^{n_{is}+j_s-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l_i - k + 1)!}{(l_s - l_i - s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_s - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=i^l}^{()} \sum_{(j_s=1)}^{l_{sa+s-i^l-j_{sa}+1}} \sum_{j_i=l_{sa}+n+s-D-j_{sa}} \\
 & \sum_{n_i=n}^n \sum_{(n_s=n-j_i+1)}^{(n_i-j_i+1)} \\
 & \frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -
 \end{aligned}$$

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$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j_i=j_s+s-1} \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_{sa}^s-l_k)} \frac{(2 \cdot n_{ik} + j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - s - 2 \cdot l_k - 2 \cdot j_{sa}^s)!}{(2 \cdot n_{ik} + 2 \cdot j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - s - 2 \cdot l_k - 2 \cdot j_{sa}^s)!} \cdot \frac{1}{(n + j_s - s - j_s)!} \cdot \frac{(l_s - k - j_{sa}^{ik})!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\begin{aligned} & ((D \geq n < n \wedge l_s \leq D - n + 1 \wedge \\ & 1 \leq j_s \leq j_i - s + 1 \wedge \\ & j_s + s - 1 \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge \\ & D + s - n < l_i \leq D + l_s + s - n - 1) \vee \\ & ((D \geq n < n \wedge l_s \leq D - n + 1 \wedge \\ & 1 \leq j_s \leq j_i - s + 1 \wedge \\ & j_s + s - 1 \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge \\ & D + s - n < l_i \leq D + l_s + s - n - 1) \vee \end{aligned}$$

$$\begin{aligned} & (D \geq n < n \wedge l_s \leq D - n + 1 \wedge \\ & 1 \leq j_s \leq j_i - s + 1 \wedge \\ & j_s + s - 1 \leq j_i \leq n \wedge \end{aligned}$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} = 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}^i\} \wedge$$

$$s \geq 2 \wedge s = s \Rightarrow$$

$$fz_{j_s, j_i}^{SDOSD} = \sum_{k=1}^{i-l-1} \sum_{j_s=2}^{j_i-s+1} \sum_{j_i=l_{sa}+n+s-k}^{l_s+s-k} \sum_{n_i=n}^n \sum_{n_{is}=n-j_s+1}^{n_i-j_s+1} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(l_s - n_s - 1)!}{(j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{i-l-1} \sum_{j_s=2}^{l_s-k+1} \sum_{j_i=l_{sa}+s-k+1}^{l_{sa}+s-k-j_{sa}+1} \sum_{n_i=n}^n \sum_{n_{is}=n-j_s+1}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

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$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} + \frac{l_i!}{(D + j_i - n - l_i)! \cdot (j_i)!} + \sum_{j_s = s}^{n_{is} + s - l_i - j_{sa} + 1} \sum_{j_i = l_{sa} + n + s - D - j_{sa}}^{n - j_s + 1} \sum_{n_i = n}^n \sum_{n_s = n - j_i + 1}^{(n_i - j_i + 1)} \frac{(n_i - n_s - 1)!}{(j_i - j_s - 2)! \cdot (n_i - n_s - j_i + 1)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_i-s+1)}^{()} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_s+s-k} \sum_{n_i=n+k}^n \sum_{(n_s=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-k)}^{()}$$

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$$\frac{(2 \cdot n_{ik} + j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - s - 2 \cdot k - 2 \cdot j_{sa}^s)!}{(2 \cdot n_{ik} + 2 \cdot j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - n - 2 \cdot k - 3 \cdot j_{sa}^s)!}$$

$$\frac{1}{(n + j_{sa}^s - s - j_s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \wedge$$

$$(D \geq n < n \wedge l_s = k = 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^l - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}^l\} \wedge$$

$$s \geq 2 \wedge s = s \Rightarrow$$

$$\begin{aligned}
 f_z S_{j_s, j_i}^{DOSD} = & \sum_{k=1}^{i^{l-1} (l_{sa} + n - D - j_{sa})} \sum_{(j_s=2)}^{l_{sa} + s - k - j_{sa} + 1} \sum_{j_i = l_{sa} + n + s - D - j_{sa}}^{l_{sa} + s - k - j_{sa} + 1} \\
 & \sum_{n_i = n}^n \sum_{(n_{is} = n - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_s = n - j_i}^{n_{is} + j_s - j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - j_s - k + 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{l-1} \sum_{(j_s = l_{sa} + n - D - j_{sa} + 1)}^{(l_s - k - 1)} \sum_{j_i = j_s + s - 1}^{l_{sa} + s - k - j_{sa} + 1} \\
 & \sum_{n_i = n}^n \sum_{(n_{is} = n - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_s = n - j_i + 1}^{n_{is} + j_s - j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot
 \end{aligned}$$

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$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{()} \sum_{(j_s=1)}^{l_{sa}+s-i-l-j_{sa}+1} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}$$

$$\sum_{n_i=n}^n \sum_{(n_i=n-j_i+1)}^{(n_i-j_i+1)}$$

$$\frac{(n_s - n_s - 1)!}{(j_i - 2)! \cdot (n_i - 1)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_i - 1)!}{(l_i - j_s - 1)! \cdot (j_i - s)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

$$\sum_{k=1}^{D+j_s-n-l_i} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{s-k-1} \sum_{j_i=j_s+s-1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_i=n+k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{()} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^{ik})}^{()}$$

$$\frac{(2 \cdot n_{ik} + j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - s - 2 \cdot k - 2 \cdot j_{sa}^s)!}{(2 \cdot n_{ik} + 2 \cdot j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - n - 2 \cdot k - 3 \cdot j_{sa}^s)!} \cdot$$

$$\frac{1}{(n + j_{sa}^s - s - j_s)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa}^s = j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, k, j_{sa}^i\} \wedge$$

$$s = 2 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik})}^{(j_i-s+1)} \sum_{(l_{ik}+s-k-j_{sa}^{ik})}^{(l_{ik}+s-k-j_{sa}^{ik})} \sum_{(n_i=n+k)}^{(n_i=n+k)} \sum_{(n_{is}=n+k-j_s+1)}^{(n_{is}=n+k-j_s+1)} \sum_{(n_s=n-j_i+1)}^{(n_s=n-j_i+1)}$$

$$\frac{(n_i - n_{is} - 1)!}{(i - l)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{D-n+1} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik})}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{(j_i=l_{ik}+s-k-j_{sa}^{ik}+2)}^{(l_i-k+1)}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{(n_{is}+j_s-j_i-k)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i - 1)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - 1)!}{(j_s + l_i - j_i - 1)! \cdot (j_i - j_s - 1)!} \cdot \frac{(n - l_i)!}{(n - j_i - 1)! \cdot (n - j_i)!} \cdot \sum_{k=0}^{l_s + s - n - j_s + 1} \binom{l_s + s - n - j_s + 1}{k} \sum_{j_i = l_i + n - D}^{j_{sa}^{ik} + 1} \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik}} \binom{n_s}{n_s = n_{ik} + j_s + j_{sa}^{ik} - j_i - j_{sa}^s - \mathbb{k}} \frac{(2 \cdot n_{ik} + j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - s - 2 \cdot \mathbb{k} - 2 \cdot j_{sa}^s)!}{(n_{ik} + j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - n - 2 \cdot \mathbb{k} - 3 \cdot j_{sa}^s)!} \cdot \frac{1}{(n + j_{sa}^s - s - j_s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa}^s = j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s = 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z^{SDOSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{ik}+n-j_s+1)}^{(l_i+n-D-s)} \sum_{j_i=l_{ik}+1}^{l_i-k+1} \sum_{n_i=n-j_i-\mathbb{k}}^{n_i=j_s+1} \sum_{n_s=n-j_i+1}^{n_s=n+\mathbb{k}-j_s+1} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} + j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{D-n+1} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j_i=j_s+s-1}^{l_i-k+1} \sum_{n_i=n+\mathbb{k}}^{n_i=n+\mathbb{k}-j_s+1} \sum_{n_s=n-j_i+1}^{n_s=n+j_s-j_i-\mathbb{k}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s - 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+k, \dots, j_i=j_s+k)}^{(l_{ik}-l_{ik}+2)} \sum_{n_i=n+k}^n \sum_{(n_{is}=n_{is}-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{is}=n_{is}-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{is}=n_{is}-j_s+1)}^{(n_i-j_s+1)} \frac{(n_{ik} + j_{sa}^{ik} - 2 \cdot j_{sa}^{ik} - n_s - j_i - n - 2 \cdot \mathbb{k} - 2 \cdot j_{sa}^s)!}{(n_{ik} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{sa}^{ik} - n_s - j_i - n - 2 \cdot \mathbb{k} - 3 \cdot j_{sa}^s)!} \cdot \frac{1}{(n + j_{sa}^s - s - j_s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s = D - n + 1 \wedge$$

$$2 \leq j_s \leq j_s - s + 1 \wedge$$

$$j_i + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa}^s = j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s = 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$fz S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(j_i-s+1)} \sum_{j_i=l_{ik}+n+s-D-j_s^{ik}}^{l_s+s-k}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_s - l_s + 1)!}{(j_s + j_i - l_s - 1)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)} \sum_{j_i=l_s+s-k+1}^{l_{ik}+s-k-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_i-s+1)}^{(\cdot)} \sum_{j_i=l_{ik}+n+s-D-j_{sa}^{i,k}}$$

$$\sum_{n_i=n_{i_1}+\dots+n_{i_s+1}}^n \sum_{n_{i_1}+\dots+n_{i_s+1}}^{(j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{i,k}} \sum_{n_{ik}+j_s+1-j_i-j_{sa}^{i,k}}^{(\cdot)}$$

$$\frac{(2 \cdot n_{ik} + j_s + 2 \cdot j_{sa}^{i,k} - n_s - j_i - s - 2 \cdot \mathbb{k} + j_{sa}^s)!}{(2 \cdot n_{ik} + 2 \cdot j_s + 2 \cdot j_{sa}^{i,k} - n_s - j_i - s - 2 \cdot \mathbb{k} - 3 \cdot j_{sa}^s)!}$$

$$\frac{1}{(n + j_{sa}^s - s - j_s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D > n < n_{i_1} > D - l_i + 1 \wedge$$

$$2 \leq i_s \leq j_i - s + 1 \wedge$$

$$j_i + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{i,k} + 1 \leq l_s \wedge l_{ik} - j_{sa}^{i,k} - s = l_{ik} \wedge$$

$$D > n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa}^s = j_{sa}^i \wedge$$

$$s: \{j_{sa}^i, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s = 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned}
 f_z S_{j_s, j_i}^{DOSD} = & \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_{ik}+n-D-j_{s\bar{a}}^{ik})} \sum_{j_i=l_{ik}+n+s-D-j_{s\bar{a}}^{ik}}^{l_{ik}+s-k-j_{s\bar{a}}^{ik}+1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i-k}^{n_{is}+j_s-j_i-k} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{n+1} \sum_{(j_s=l_{ik}+n-D-j_{s\bar{a}}^{ik}+1)}^{(l_s-k+1)} \sum_{j_i=j_s+s-1}^{l_{ik}+s-k-j_{s\bar{a}}^{ik}+1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot
 \end{aligned}$$

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$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_s-k+1)} \sum_{j_i=j_s+s-1} \sum_{n_i=n+k}^n \sum_{(n_i-j_s+1)}^{(n_i+k-j_s+1)} \sum_{(n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik})}^{(n_{ik}+j_s+j_{sa}^{ik}-j_i-k)} \frac{(2 \cdot n_{ik} + j_s + 2 \cdot j_{sa}^{ik} - n - j_i - s - k - 2 \cdot j_{sa}^s)!}{(2 \cdot n_{ik} + 2 \cdot j_s + 2 \cdot j_{sa}^{ik} - n - j_i - s - k - 3 \cdot j_{sa}^s)!} \frac{(n + j_{sa}^s - s - j_s)!}{(l_s - k - 1)!} \frac{(l_s - k - 1)!}{(j_s - k + 1)! \cdot (j_s - 2)!} \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\begin{aligned} & ((D \geq n < n \wedge l_s > D - n + 1) \wedge \\ & 2 \leq j_s \leq j_i - s + 1 \wedge \\ & j_s + s - 1 \leq j_i \leq n \wedge \\ & l_{ik} = j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik}) \vee \\ & ((D \geq n < n \wedge l_s > D - n + 1) \wedge \\ & 2 \leq j_s \leq j_i - s + 1 \wedge \\ & j_s + s - 1 \leq j_i \leq n \wedge \\ & l_{ik} = j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik}) \vee \\ & ((D \geq n < n \wedge l_s > D - n + 1) \wedge \\ & 2 \leq j_s \leq j_i - s + 1 \wedge \\ & j_s + s - 1 \leq j_i \leq n \wedge \end{aligned}$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik}) \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa}^s = j_{sa}^l - 1 \wedge$$

$$s: \{j_{sa}^s, k, j_{sa}^l\} \wedge$$

$$s = 2 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$fz S_{j_s j_i}^{DOSD} = \sum_{k=1}^{D-n+1} \sum_{j_s=l_s+n-D}^{(j_s+s+1)} \sum_{j_i=l_i+n-D}^{s-k} \frac{(n_i - j_s + 1) \cdot (n_{is} + j_s - j_i - k)}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(j_s - n_s - 1)!}{(j_s - j_i - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{D-n+1} \sum_{j_s=l_s+n-D}^{(l_s-k+1)} \sum_{j_i=l_s+s-k+1}^{l_i-k+1} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

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$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 1)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(l_i)!}{(D + j_i - n - l_i)! \cdot (j_i)!} \cdot \sum_{n_i=n+1}^{D+l_s+s-n-l_i} \sum_{n_{is}=n+k-j_s+1}^{l_s+s-n} \sum_{n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^{ik}}^{l_s+s-n} \sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}}^{n} \sum_{n_{is}=n+k-j_s+1}^{(n_{i,j_s+1})} \frac{(2 \cdot n_{ik} + j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - s - 2 \cdot k - 2 \cdot j_{sa}^s)!}{(2 \cdot n_{ik} + 2 \cdot j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - n - 2 \cdot k - 3 \cdot j_{sa}^s)!} \cdot \frac{1}{(n + j_{sa}^s - s - j_s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge j_s + s - 1 \leq j_i \leq n \wedge l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik}) \vee (D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik})) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa}^s = j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s = 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$fz S_{j_s}^{s, D} = \sum_{k=1}^{D-n} \sum_{j_s=l_s+n-D}^{(l_i+n-D-s)} \sum_{j_i=l_i+n-D}^{l_i-k+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{D-n+1} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)} \sum_{j_i=j_s+s-1}^{l_i-k+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{i_s}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{i_s}+j_s-j_i-\mathbb{k}}$$

$$\frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \frac{(n_{i_s} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{i_s} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - j_s - k + 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_s - l_s)! \cdot (n - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D - l_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)} \sum_{j_i=j_s+s-1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{i_s}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{i_s}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^{ik}-\mathbb{k})}^{()}$$

$$\frac{(2 \cdot n_{ik} + j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - s - 2 \cdot \mathbb{k} - 2 \cdot j_{sa}^s)!}{(2 \cdot n_{ik} + 2 \cdot j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - n - 2 \cdot \mathbb{k} - 3 \cdot j_{sa}^s)!} \cdot \frac{1}{(n + j_{sa}^s - s - j_s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

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$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa}^s = j_{sa}^l - 1 \wedge$$

$$s: \{j_{sa}^s, k, j_{sa}^l\} \wedge$$

$$s = 2 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$fz S_{j_s, j_i}^{DG} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{sa}+k, j_i=l_{sa}+k-j_{sa}+1)}^{(j_i-s+1, l_{sa}+s-k-j_{sa}+1)} \sum_{j_i=l_i+n-D}^{l_{sa}+s-k-j_{sa}+1} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1, n_i-j_s+1)}^{n_i-j_s+1} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{D-n+1} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1, l_{sa}-k-j_{sa}+2)}^{(l_{sa}-k-j_{sa}+2)} \sum_{j_i=l_{sa}+s-k-j_{sa}+2}^{l_i-k+1}$$

$$\begin{aligned}
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_s - s - 1)!}{(j_s + l_i - n - l_s - j_i - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{s=1}^{D+l_s+s-n-l_i} \sum_{j_i=j_i-s+1}^{()} \sum_{j_i=l_i+n-D}^{l_{sa}+s-k-j_{sa}+1} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-\mathbb{k})}^{()} \\
 & \frac{(2 \cdot n_{ik} + j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - s - 2 \cdot \mathbb{k} - 2 \cdot j_{sa}^s)!}{(2 \cdot n_{ik} + 2 \cdot j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - n - 2 \cdot \mathbb{k} - 3 \cdot j_{sa}^s)!} \cdot \\
 & \frac{1}{(n + j_{sa}^s - s - j_s)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

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$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa}^s = j_{sa}^l - 1 \wedge$$

$$s: \{j_{sa}^s, k, j_{sa}^l\} \wedge$$

$$s = 2 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$\begin{aligned}
 & \sum_{j_s, j_i}^{D-n+1, D} \sum_{(j_s=l_{sa}, \dots, D-j_{sa}+1)}^{D-s} \sum_{j_i=l_i+n-D}^{l_i-k+1} \\
 & \sum_{n_i=n+k}^n \sum_{n_i=n+k-j_s+1}^{(n_i-j_s)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{D-n+1} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{sa}-k-j_{sa}+2)} \sum_{j_i=j_s+s-1}^{l_i-k+1}
 \end{aligned}$$

$$\begin{aligned}
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_s - s - 1)!}{(j_s + l_i - n - l_s - j_i - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{i=1}^{D+l_s+s-n-l_i} \sum_{j_s=l_i+n-D-s+1}^{j_{sa}-k-j_{sa}+2} \sum_{j_i=j_s+s-1}^{j_i} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^{ik})}^{(\quad)} \\
 & \frac{(2 \cdot n_{ik} + j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - s - 2 \cdot \mathbb{k} - 2 \cdot j_{sa}^s)!}{(2 \cdot n_{ik} + 2 \cdot j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - n - 2 \cdot \mathbb{k} - 3 \cdot j_{sa}^s)!} \cdot \\
 & \frac{1}{(n + j_{sa}^s - s - j_s)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i - 1)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - 1)!}{(j_s + l_i - j_i - 1)! \cdot (j_i - j_s - 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{k=1}^{D+l_i-n-l_i} \sum_{j_i-s+1}^{n-l_i} \sum_{l_{sa}+n+s-D-j_{sa}}^{n_{ik}+1} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{k=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-k)} \frac{(2 \cdot n_{ik} + j_s^s + 2 \cdot j_{sa}^{ik} - n_s - j_i - s - 2 \cdot k - 2 \cdot j_{sa}^s)!}{(2 \cdot n_{ik} + j_s^s + 2 \cdot j_{sa}^{ik} - n_s - j_i - n - 2 \cdot k - 3 \cdot j_{sa}^s)!} \cdot \frac{1}{(n + j_{sa}^s - s - j_s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$D \geq n < n \wedge I = \mathbb{k} \geq 0 \wedge$

$j_{sa}^s = j_{sa}^i - 1 \wedge$

$s: \{j_{sa}^s, \mathbb{k}, j_{sa}^i\} \wedge$

$s = 2 \wedge s = s + \mathbb{k} \wedge$

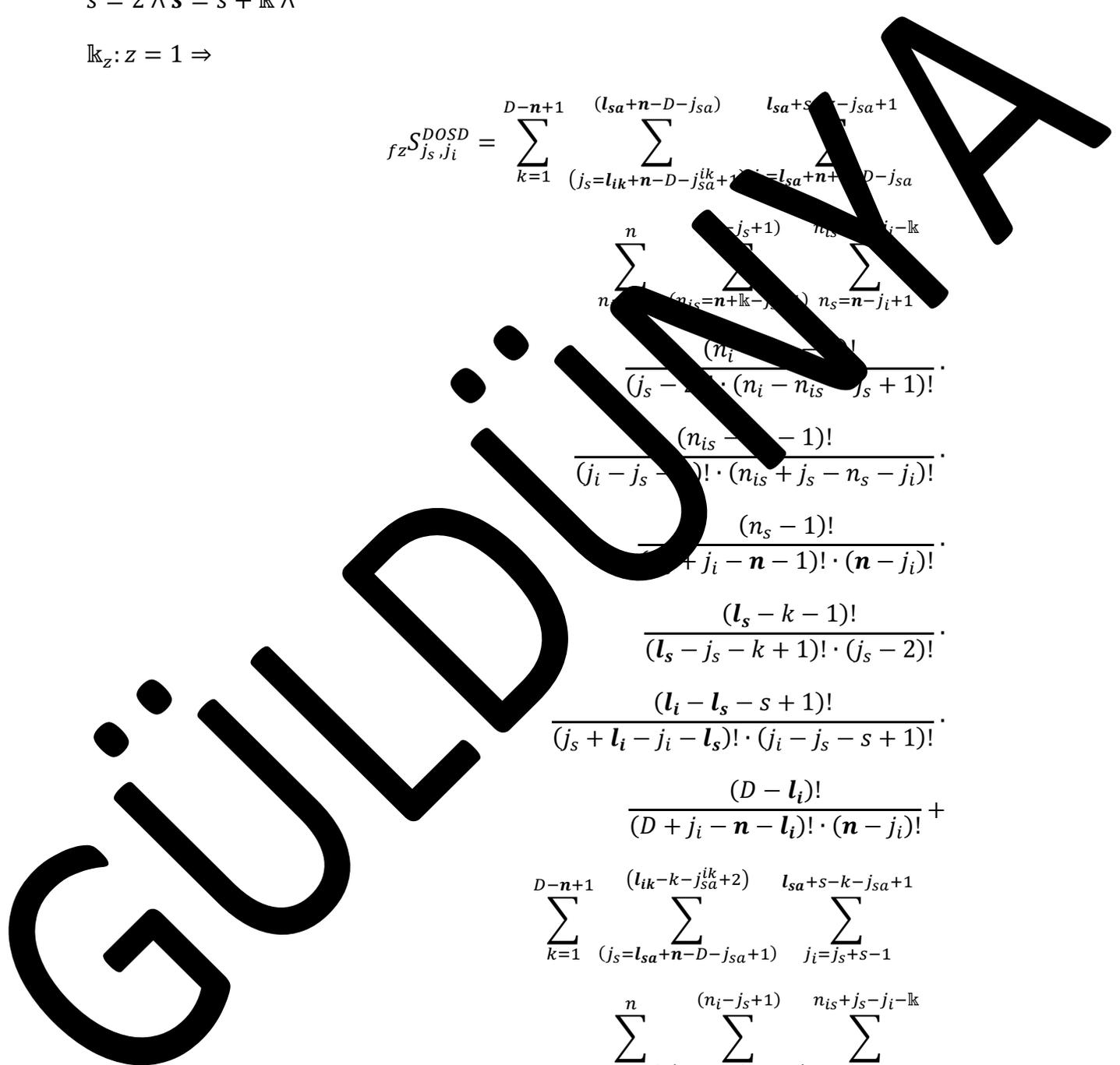
$\mathbb{k}_z: z = 1 \Rightarrow$

$$f_z^{DOSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_{sa}+n-D-j_{sa})} \sum_{(j_i=l_{sa}+n-D-j_{sa})}^{(l_{sa}+s-k-j_{sa}+1)} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_i-j_i-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} + j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(j_i + j_s - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{D-n+1} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j_i=j_s+s-1}^{l_{sa}+s-k-j_{sa}+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$



$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s - 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_{sa}+n-k, j_{sa}=j_s+1)}^{(l_{ik}-k, n)} \sum_{(j_i=j_s+k, n)}^{(n, (n_i-j_s+1))} \sum_{(n_i=n+k, n_{is}=j_s+1)}^{(n, (n_i-j_s+1))} \sum_{(n_{is}=n_{is}+j_{sa}^s-j_{sa}^{ik}, n_{is}=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-k)}^{(n, (n_i-j_s+1))} \frac{(n_{ik} + j_{sa}^s - 2 \cdot j_{sa}^{ik} - n - s - 2 \cdot k - 2 \cdot j_{sa}^s)!}{(n_{ik} + 2 \cdot j_s^s - 2 \cdot j_{sa}^{ik} - n_s - j_i - n - 2 \cdot k - 3 \cdot j_{sa}^s)!} \cdot \frac{1}{(n + j_{sa}^s - s - j_s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

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$$s = 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_{j_i}^{DOSD} = \sum_{k=1}^{D-1} \sum_{(j_s=l_s+n-D)}^{(j_i-k)} \sum_{l_s+s-k}^{l_s+n-s-D-j_{sa}} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{(n_{is}+j_s-j_i-\mathbb{k})}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)} \sum_{j_i=l_s+s-k+1}^{l_{sa}+s-k-j_{sa}+1}$$

$$\begin{aligned}
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_s - s - 1)!}{(j_s + l_i - n - l_s - s + 1)! \cdot (i_s - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=0}^{n+l_s+s-n-l_i} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_s+s-k} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-\mathbb{k})}^{()} \\
 & \frac{(2 \cdot n_{ik} + j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - s - 2 \cdot \mathbb{k} - 2 \cdot j_{sa}^s)!}{(2 \cdot n_{ik} + 2 \cdot j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - n - 2 \cdot \mathbb{k} - 3 \cdot j_{sa}^s)!} \cdot \\
 & \frac{1}{(n + j_{sa}^s - s - j_s)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
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$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa}^s = j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, k, j_{sa}^i\} \wedge$$

$$s = 2 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$\begin{aligned} \overset{DOSD}{j_s, j_i} = & \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_{sa}+n-D-j_{sa})} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{sa}+s-k-j_{sa}+1} \\ & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k} \\ & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ & \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\ & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \end{aligned}$$

$$\begin{aligned}
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_s-k-1)} \sum_{j_i=j_s+s-1}^{l_{sa}+s-k-j_{sa}+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+l_k}^{j_i-l_k} \\
 & \frac{(n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n - j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} - \\
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_s-k-1)} \sum_{j_i=j_s+s-1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-l_k)}^{()}
 \end{aligned}$$

GÜLDÜZÜMÜ

$$\frac{(2 \cdot n_{ik} + j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - s - 2 \cdot \mathbb{k} - 2 \cdot j_{sa}^s)!}{(2 \cdot n_{ik} + 2 \cdot j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - n - 2 \cdot \mathbb{k} - 3 \cdot j_{sa}^s)!}$$

$$\frac{1}{(n + j_{sa}^s - s - j_s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!}$$

$$\frac{(D - l)!}{(D + j_i - n - l)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$l_i \leq D + s - n \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa}^s = j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s = 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$fz S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i^{l-1} (j_i - s + 1)} \sum_{(j_s=2)}^{l_{ik} + s - k - j_{sa}^{ik} + 1} \sum_{j_i=s+1}^{n_i - j_s + 1} \sum_{n_i=n+\mathbb{k}}^{n_{is}+j_s-j_i-\mathbb{k}} \sum_{n_s=n-j_i+1}^{n_i - n_{is} - 1} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\begin{aligned}
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{i l - 1} \sum_{(j_s=2)}^{(l_{ik} - k - j_{sa}^{ik} + 2)} \sum_{i=l_{ik}+s-1}^{l_{ik}+1} \sum_{j_{sa}^{ik}+2}^{j_{sa}^{ik}+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-1)}^{(n_{is}=n+l_k)} \sum_{n_s=n-j_i+1}^{n_s=n-j_i-l_k} \\
 & \frac{(n_i - n_s - 1)!}{(j_s - 1)! \cdot (n_i - n_s - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=i}^l \sum_{(j_s=1)}^{l_i - i l + 1} \sum_{j_i=s}^{l_i - i l + 1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_s=n-j_i+1)}^{(n_i - j_i - l_k + 1)} \\
 & \frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot
 \end{aligned}$$

GÜLDÜZ

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$\sum_{k=1}^{i^{l-1}} \sum_{(j_s=j_i-s+1)}^{(\)} \sum_{j_i=s+1}^{l_{ik}+s-k-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+1}^n \sum_{(n+j_s+1)}^{(n+j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}+j_s+1}^{(\)} \sum_{(n_{ik}+j_s+1-j_i-j_{sa}^s-k)}$$

$$\frac{(2 \cdot n_{ik} + j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - s - 2 \cdot k - 2 \cdot j_{sa}^s)!}{(2 \cdot n_{ik} + 2 \cdot j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - s - 2 \cdot k - 3 \cdot j_{sa}^s)!}$$

$$\frac{1}{(n + j_{sa}^s - s - j_s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=i^l}^{(\)} \sum_{(j_s=1)} \sum_{j_i=s}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{ik}=n_i-j_s-j_{sa}^{ik})}^{(\)} \sum_{n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-k}$$

$$\frac{(2 \cdot n_{ik} + j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - s - 2 \cdot k - 2 \cdot j_{sa}^s)!}{(2 \cdot n_{ik} + 2 \cdot j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - n - 2 \cdot k - 3 \cdot j_{sa}^s)! \cdot (n - s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l_i \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa}^s = j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, k, j_{sa}^i\} \wedge$$

$$s = 2 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$fz_{j_s, j_i}^{SDOSD} = \sum_{k=1}^{l-1} \sum_{j_i=j_s+s-1}^{n-k-j_{sa}^{ik}+1} \sum_{n_i=n+k}^n \sum_{n_s=n-j_i+1}^{n_i-j_i-k} \frac{(n_i - n_s - 1)!}{(j_s - 1)! \cdot (n_i - n_s - j_s + 1)!} \cdot \frac{(n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_s + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^l \sum_{j_s=1}^{l-k} \sum_{j_i=s}^{l-k-j_s+1}$$

$$\sum_{n_i=n+k}^n \sum_{n_s=n-j_i+1}^{n_i-j_i-k+1}$$

GÜLDÜNKYA

$$\frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - j_s)}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$\sum_{k=1}^{l-1} \sum_{i=2}^{(l_{ik} - i_{k+2})}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{n_{is}=n_i-j_s+1}^{(n_i-j_s+1)}$$

$$\sum_{n_{is}=n_i+j_{sa}^s-j_{sa}^{ik}} \sum_{n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-\mathbb{k}}$$

$$\frac{(2 \cdot n_{ik} + j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - s - 2 \cdot \mathbb{k} - 2 \cdot j_{sa}^s)!}{(2 \cdot n_{ik} + 2 \cdot j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - n - 2 \cdot \mathbb{k} - 3 \cdot j_{sa}^s)!}$$

$$\frac{1}{(n + j_{sa}^s - s - j_s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{l-1} \sum_{j_s=1}^{()} \sum_{j_i=s}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{n_{ik}=n_i-j_s-j_{sa}^{ik}}^{()} \sum_{n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-\mathbb{k}}$$

$$\frac{(2 \cdot n_{ik} + j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - s - 2 \cdot \mathbb{k} - 2 \cdot j_{sa}^s)!}{(2 \cdot n_{ik} + 2 \cdot j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - n - 2 \cdot \mathbb{k} - 3 \cdot j_{sa}^s)! \cdot (n - s)!}$$

GÜLDENWA

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa}^s = j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s = 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$j_{sa}^{DOSD} = \sum_{j_i=1}^{n-1} \sum_{(j_s=2)}^{j_i-s+1} \sum_{j_i=l_i+n-D}^{l_{ik}+s-k-j_{sa}^{ik}+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

GÜLDENFELD

$$\begin{aligned}
 & \sum_{k=1}^{i^{l-1} (l_{ik-k-j_{sa}^{ik}+2)} } \sum_{(j_s=2)}^{l_i-k+1} \sum_{j_i=l_{ik+s-k-j_{sa}^{ik}+2}}^{l_i-k+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i}^{n_{is}+j_s-j_i-l_k} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l_i - k + 1)!}{(j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_s - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^i \sum_{(j_s=1)}^{()} \sum_{j_i=l_i+n-D}^{l_i-i^{l+1}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_s=n-j_i+1)}^{(n_i-j_i-l_k+1)} \\
 & \frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -
 \end{aligned}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_i-s+1)}^{(\cdot)} \sum_{j_i=l_i+n-D}^{l_{ik}+s-k-j_{sa}^{ik}+1} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{(\cdot)} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_{sa}^s-k)}^{(\cdot)} \frac{(2 \cdot n_{ik} + j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - s - 1 - 2 \cdot j_{sa}^s)!}{(2 \cdot n_{ik} + 2 \cdot j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - n - 2 \cdot k - j_{sa}^s)!} \cdot \frac{1}{(n+j_s-s-j_s)!} \cdot \frac{(l_s-k)}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \frac{(D-l_i)!}{(D-j_i-n-l_i)! \cdot (n-j_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq l_i \wedge$$

$$l_i - j_{sa}^{ik} + 1 \leq l_s \wedge l_i - j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + 1 - n + 1 \wedge$$

$$D \geq n < n \wedge l_i = k \geq 1 \wedge$$

$$j_{sa}^s = j_{sa}^i \wedge$$

$$s: \{j_{sa}^i, j_{sa}^s\} \wedge$$

$$s = 2 \wedge s = j_{sa}^i + k \wedge$$

$$k \geq 1 \Rightarrow$$

$$fzS_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(l_i+n-D-s)} \sum_{j_i=l_i+n-D}^{l_i-k+1}$$

$$\begin{aligned}
& \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{i=1}^{i^{l-1}} \sum_{s=l_i+n-D-s+1}^{k-k-j_s^{ik}+2} \sum_{j_i=j_s+s-1}^{l_i-k+1} \\
& \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +
\end{aligned}$$

$$\begin{aligned}
 & \sum_{k=1}^n \sum_{(j_s=1)}^{()} \sum_{j_i=l_i+n-D}^{l_i-l+1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_s=n-j)}^{(n_i-j_i-k+1)} \\
 & \frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n_s - j_i)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{D+l_s+s-1} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{ik}-k-j_{ik}+2)} \sum_{j_i=j_s+s-1}^n \\
 & \sum_{n_i=n+k}^n \sum_{(n_s=n+k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{()} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-k)}^{()} \\
 & \frac{(2 \cdot n_{ik} + j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - s - 2 \cdot k - 2 \cdot j_{sa}^s)!}{(2 \cdot n_{ik} + 2 \cdot j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - n - 2 \cdot k - 3 \cdot j_{sa}^s)!} \cdot \\
 & \frac{1}{(n + j_{sa}^s - s - j_s)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa}^s = j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s = 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(j_i-s+1)} \sum_{l_s=s-k}^{l_s+s-k} \sum_{n_i=n+\mathbb{k}}^{(n_i-j_s+1)} \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_{is}+j_s-j_i-\mathbb{k})} \sum_{n_s=n-j_i+1}^{(n_s-n-j_i+1)}$$

$$\frac{(n_i - n_{is} - 1)!}{(i - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(l_s-k+1)} \sum_{j_i=l_s+s-k+1}^{l_{ik}+s-k-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - s + 1)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(n - l_i)!}{(n - l_i - 1)! \cdot (n - j_i)!}$$

$$\sum_{l=0}^{j_i} \sum_{k=0}^{l} \binom{l}{k} \binom{l-k}{a+1} \sum_{j_s=1}^{l-k} \binom{l-k-j_s}{ik} \binom{l-k-j_s}{j_s a}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_s=n-j_i+1)}^{(n_i-j_i-l_k+1)}$$

$$\frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_i-s+1)}^{()} \sum_{j_i=l_{ik}+n+s-D-j_s a}^{l_s+s-k}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-\mathbb{k})} \frac{(2 \cdot n_{ik} + j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - s - 2 \cdot \mathbb{k} - 2 \cdot j_{sa}^s)!}{(2 \cdot n_{ik} + 2 \cdot j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - n - 2 \cdot \mathbb{k} - 3 \cdot j_{sa}^s)!} \cdot \frac{1}{(n + j_{sa}^s - s - j_{sa}^i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - l_i)!}$$

$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_i - s + 1 \wedge$

$j_s + s - 1 \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$

$D + s - n < l_i \leq D + l_s + s - n$

$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$

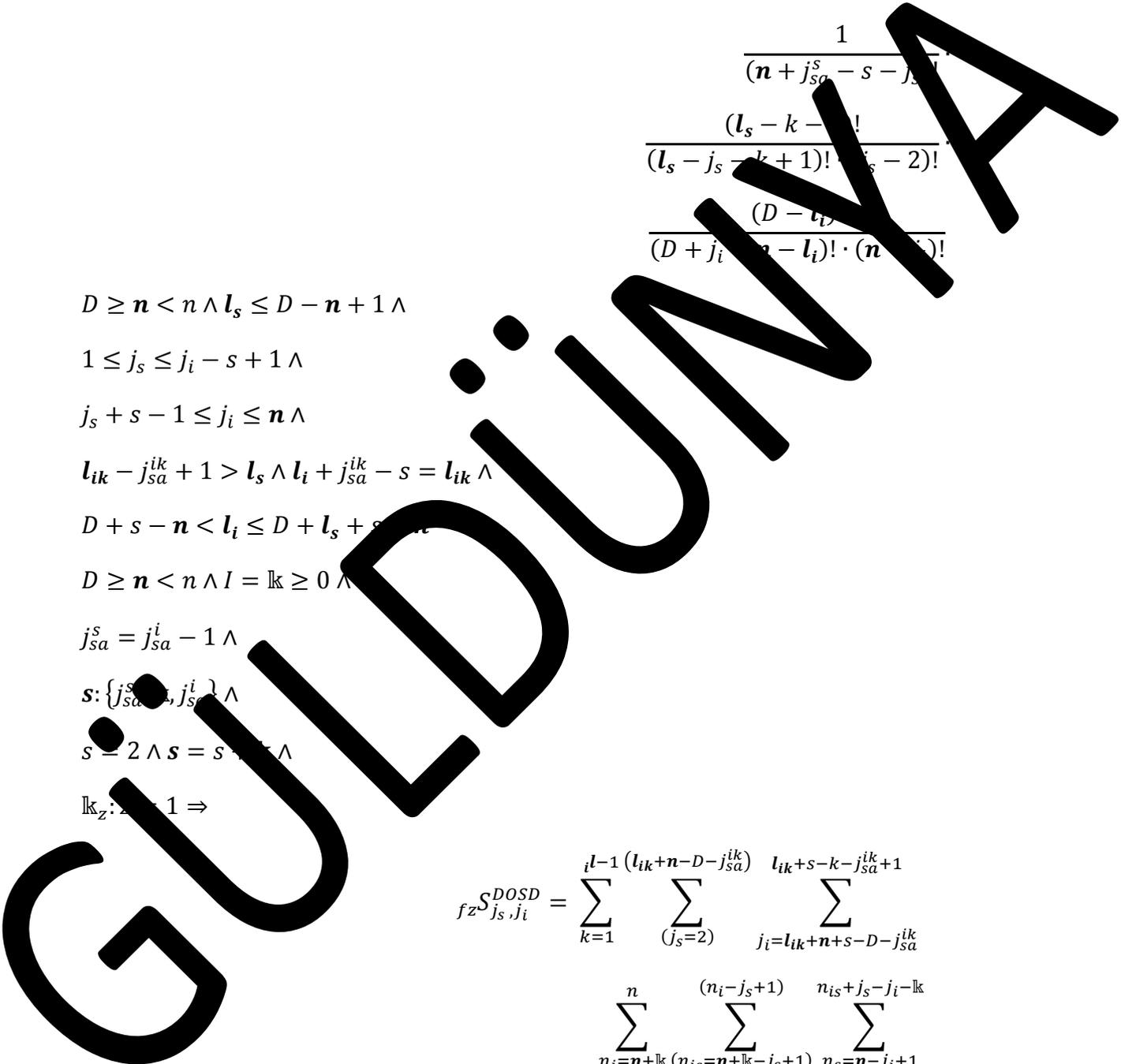
$j_{sa}^s = j_{sa}^i - 1 \wedge$

$s: \{j_{sa}^s, j_{sa}^i\} \wedge$

$s = 2 \wedge s = s + 1 \wedge$

$\mathbb{k}_z: 2 \wedge 1 \Rightarrow$

$$fz_{j_s, j_i}^{DOSD} = \sum_{k=1}^{l-1} \sum_{(j_s=2)}^{(l_{ik}+n-D-j_{sa}^{ik})} \sum_{j_i=l_{ik}+n+s-D-j_{sa}^{ik}}^{l_{ik}+s-k-j_{sa}^{ik}+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$



$$\begin{aligned}
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{i-1} \sum_{j_i=l_{ik}+n-D-j_s+1}^{(l_s-k+1)} \sum_{j_i=j_s+s-1}^{(l_s-k+1) \cdot (l_s-k+1) \cdot j_s^{ik}+1} \\
 & \sum_{n_i=n+l_k}^{(n_i-j_s+1)} \sum_{n_i=n+l_k-j_s+1}^{(n_i-j_s+1)} \sum_{n_i=n-j_i+1}^{(n_i-j_s+1) \cdot (n_i-j_s+1) \cdot n_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_s - n_s - 1)!}{(j_s - 2)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{i-1} \sum_{j_i=l_{ik}+n+s-D-j_s^{ik}}^{() \cdot l_{ik}+s-1} \sum_{j_i=l_{ik}+n+s-D-j_s^{ik}}^{i-l-j_s^{ik}+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{n_i=n-j_i+1}^{(n_i-j_i-l_k+1)} \\
 & \frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!}
 \end{aligned}$$

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$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_s-k+1)} \sum_{j_{sa}^{ik}=s-1}^{j_{sa}^{ik}=s-1}$$

$$\sum_{n_i=n}^n \sum_{n_{is}=n+l_k-j_s+1}^{n_{is}=n+l_k-j_s+1}$$

$$\sum_{n_{ik}=n_{is}}^{n_{ik}=n_{is}-j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^{ik})}$$

$$\frac{(2 \cdot n_{ik} + j_s - 2 \cdot j_{sa}^{ik} - n_s - s - 2 \cdot l_k - 2 \cdot j_{sa}^s)!}{(2 \cdot n_{ik} + 2 \cdot j_s + j_{sa}^{ik} - n_s - n - 2 \cdot l_k - 3 \cdot j_{sa}^s)!}$$

$$\frac{1}{(n + j_{sa}^s - s - j_s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + j_{sa}^{ik} = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$(j_s - n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s \leq j_i \leq n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$l_i \leq D + s - n)) \wedge$$

$$D \geq n < n \wedge l_i - s + 1 > l_s \wedge$$

$$j_{sa}^s = j_{sa} - \mathbb{k} \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s = z, s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1, 2, \dots$$

$$f_{z, j_s, j_i}^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(j_i-s+1)} \sum_{j_i=s+1}^{l_s+s-k} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{i-1} \sum_{j_s=1}^{(l_s - k + 1)} \sum_{n_i=n+l_k}^n \sum_{n_s=n+l_k-j_s+1}^{n_{is}+j_s-j_i-k} \frac{(n_i - n_{is} - 1)!}{(i - l)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^i \sum_{j_s=1}^{(l_s - k + 1)} \sum_{j_i=s}^{l_i - i + 1}$$

$$\sum_{n_i=n+l_k}^n \sum_{n_s=n-j_i+1}^{(n_i - j_i - k + 1)}$$

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$$\frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - 1)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$\sum_{k=0}^{l_i - (j_i - s + 1)} \sum_{j_i = j_i - s + 1}^{(j_i - s + 1) + s - k}$$

$$\sum_{n_i = n + k}^n \sum_{n_s = n_i - j_s + 1}^{(n_i - j_s + 1)}$$

$$\sum_{n_s = n_i + j_s - j_{sa}^{ik}}^{(j_{sa}^{ik})} \sum_{n_s = n_{ik} + j_s + j_{sa}^{ik} - j_i - j_{sa}^s - k}^{(j_{sa}^{ik})}$$

$$\frac{(2 \cdot n_{ik} + j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - s - 2 \cdot k - 2 \cdot j_{sa}^s)!}{(2 \cdot n_{ik} + 2 \cdot j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - n - 2 \cdot k - 3 \cdot j_{sa}^s)!}$$

$$\frac{1}{(n + j_{sa}^s - s - j_s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=0}^{l_i} \sum_{j_s=1}^{(j_s)} \sum_{j_i=s}$$

$$\sum_{n_i = n + k}^n \sum_{n_{ik} = n_i - j_s - j_{sa}^{ik}}^{(j_{sa}^{ik})} \sum_{n_s = n_{ik} + j_s + j_{sa}^{ik} - j_i - j_{sa}^s - k}$$

$$\frac{(2 \cdot n_{ik} + j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - s - 2 \cdot k - 2 \cdot j_{sa}^s)!}{(2 \cdot n_{ik} + 2 \cdot j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - n - 2 \cdot k - 3 \cdot j_{sa}^s)! \cdot (n - s)!}$$

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$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$((D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s$$

$$(l_i \leq D + s - n) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa}^s = j_{sa}^l - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}^l\} \wedge$$

$$s = 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned}
 f_{j_s, j_i}^{S_{DOSD}} &= \sum_{k=1}^{l_i-1} \sum_{(j_s=2)}^{(l_s-k+1)} \sum_{j_i=j_s+s-1}^{l_i-k+1} \\
 &\sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i}^{n_{i_s}+j_s-j_i-k} \\
 &\frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \\
 &\frac{(n_{i_s} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{i_s} - n_s - j_i)!} \cdot \\
 &\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 &\frac{(l_s - l_i - k + 1)!}{(l_s - l_i - k + 1)! \cdot (j_s - 2)!} \cdot \\
 &\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 &\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!} + \\
 &\sum_{k=1}^{()} \sum_{(j_s=1)}^{l_i - i^{l+1}} \sum_{j_i=s} \\
 &\sum_{n_i=n+l_k}^n \sum_{(n_s=n-j_i+1)}^{(n_i-j_i-k+1)} \\
 &\frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!} \cdot \\
 &\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 &\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!} \cdot \\
 &\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!} -
 \end{aligned}$$

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$$\begin{aligned}
 & \sum_{k=1}^{i^{l-1} (l_s - k + 1)} \sum_{(j_s=2)} \sum_{j_i=j_s+s-1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_i=n+l_k-j_s)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_{sa}^s-l_k)}^{()} \\
 & \frac{(2 \cdot n_{ik} + j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - s - 2 \cdot l_k - 2 \cdot j_{sa}^s)!}{(2 \cdot n_{ik} + 2 \cdot j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - n - 2 \cdot l_k - 2 \cdot j_{sa}^s)!} \cdot \\
 & \frac{1}{(n + j_s - s - j_s)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - j_i)!} \\
 & \sum_{k=i^l}^{()} \sum_{(j_s=1)} \sum_{j_i=s} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n_i-j_s-j_{sa}^{ik})}^{()} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-l_k)} \\
 & \frac{(2 \cdot n_{ik} + j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - s - 2 \cdot l_k - 2 \cdot j_{sa}^s)!}{(2 \cdot n_{ik} + 2 \cdot j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - n - 2 \cdot l_k - 3 \cdot j_{sa}^s)! \cdot (n - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}
 \end{aligned}$$

$$\begin{aligned}
 & ((D \geq n < n) \wedge l_s \leq D - n + 1 \wedge \\
 & 1 \leq j_i - s + 1 \wedge \\
 & j_s + s - 1 \leq j_i \leq n \wedge \\
 & l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge \\
 & D + s - n < l_i \leq D + l_s + s - n - 1) \vee
 \end{aligned}$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \wedge$$

$$D \geq n < n \wedge l_i - s + 1 > l_s \wedge$$

$$j_{sa}^s = j_{sa} - \mathbb{k} \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s = z, s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 =$$

$$fz S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(j_i-s+1)} \sum_{j_i=l_i+n-D}^{l_s+s-k} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(l_i)!}{(D + j_i - n - l_i)! \cdot (j_i)!} +$$

$$\sum_{k=1}^{i-1} \sum_{j_s=0}^{(l_s-k-1)} \sum_{n_i=n+l_k}^n \sum_{n_s=n+l_k-j_s+1}^{n_{is}+j_s-j_i-k} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k}$$

$$\frac{(n_i - n_{is} - 1)!}{(i - l_i)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^i \sum_{j_s=1}^{()} \sum_{j_i=l_i+n-D}^{l_i-i+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{n_s=n-j_i+1}^{(n_i-j_i-k+1)}$$

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$$\frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - l_s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{j_i=l_i+k}^{n-l_s-k} \binom{n-l_s-k}{j_i-l_i+k} \binom{n-l_s-k}{j_i-l_i+k}$$

$$\sum_{n_i=n+l_k}^n \sum_{j_s=j_s+1}^{(n_i-j_s+1)}$$

$$\sum_{n_i=n+l_k}^n \sum_{j_s=j_s+1}^{(n_i-j_s+1)}$$

$$\frac{(n_{ik} + j_{sa} - 2 \cdot j_{sa} - n_s - s - 2 \cdot l_k - 2 \cdot j_{sa}^s)!}{(n_{ik} + 2 \cdot j_s - 2 \cdot j_{sa}^{ik} - n_s - j_i - n - 2 \cdot l_k - 3 \cdot j_{sa}^s)!}$$

$$\frac{1}{(n + j_{sa}^s - s - j_s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n - 1 \wedge l_i \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_i + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa}^s = j_{sa}^l - 1 \wedge$$

$$s: \{j_{sa}^s, k, j_{sa}^l\} \wedge$$

$$s = 2 \wedge s = k + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$fz S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i^{l-1} (l_i + n - D - s)} \sum_{(j_s=2)}^{l_i - k + 1} \sum_{j_i = l_i + n - D}^{n} \sum_{(n_i = n + k - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_s = n - j_i + 1}^{n_i + j_s - j_i - k} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\begin{aligned}
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \\
 & \sum_{k=1}^{i-1} \sum_{(j_s=l_i+k, n_2=s+1)}^{(l_s-k+1)} \sum_{(j_i=j_s+k)}^{(n_i-j_s+1)} \sum_{(n_{is}=j_s-j_i-k)}^{(n_{is}+j_s-j_i-k)} \\
 & \sum_{(n_i=n+k)}^{(n_i+n+k-j_s+1)} \sum_{(n_s=n-j_i+1)}^{(n_s-j_i+1)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_s - n_s - 1)!}{(j_i - 2)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{i-1} \sum_{(j_s=1)}^{(l_i-i+1)} \sum_{(j_i=l_i+n-D)}^{(l_i-i+1)} \\
 & \sum_{n_i=n+k}^n \sum_{(n_s=n-j_i+1)}^{(n_i-j_i-k+1)} \\
 & \frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!}
 \end{aligned}$$

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$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)} \sum_{j_{s+1}^{s+1}}$$

$$\sum_{n_i=n}^n \sum_{(n_{is}=n+k-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}^{s-1} - j_{sa}^{ik} (n_{is}^{s-1} + j_s + j_{sa}^{ik} - j_i - j_{sa}^{s-k})}$$

$$\frac{(2 \cdot n_{ik} + j_{sa}^{s-1} + 2 \cdot j_{sa}^{ik} - n_s - s - \mathbb{k} - 2 \cdot j_{sa}^s)!}{(2 \cdot n_{ik} + 2 \cdot j_{sa}^{s-1} + j_{sa}^{ik} - n_s - s - \mathbb{k} - 3 \cdot j_{sa}^s)!}$$

$$\frac{1}{(n + j_{sa}^s - s - j_s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D + n + 1 \wedge$$

$$1 \leq j_s \leq j_{s+1} + 1 \wedge$$

$$j_s + 1 \leq j_i$$

$$l_{ik} - j_{sa}^{ik} + j_{sa}^{s-1} = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_s < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa}^s = j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s = 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z^{DOSD} S_{j_s, j_i} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(j_i-s+1)} \sum_{j_i=l_i+n-D}^{l_{sa}+s-k-j_{sa}+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s + j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_s - l_s - s + 1)!}{(j_s + l_s - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(l_{sa}-k-j_{sa}+2)} \sum_{j_i=l_{sa}+s-k-j_{sa}+2}^{l_i-k+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

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$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{l_i - l_s + 1} \sum_{(j_s=1)}^{l_i - l_s + 1} \sum_{j_i = l_i + n - D}$$

$$\sum_{n_i = n + k}^n \sum_{(n_s = n - j_i + 1)}$$

$$\frac{(n_i - n_s - j_i + 1)!}{(j_i - n_s - 1)! \cdot (n_i - n_s - j_i + 1)!}$$

$$\frac{(n_s - j_i - n - 1)! \cdot (n - j_i)!}{(n_s - j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_i - l_s + 1)! \cdot (j_i - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_i-s+1)}^{l_{sa}+s-k-j_{sa}+1} \sum_{j_i=l_i+n-D}$$

$$\sum_{n_i=n+k}^n \sum_{(n_s=n+k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^{ik})}^{()}$$

$$\frac{(2 \cdot n_{ik} + j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - s - 2 \cdot k - 2 \cdot j_{sa}^s)!}{(2 \cdot n_{ik} + 2 \cdot j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - n - 2 \cdot k - 3 \cdot j_{sa}^s)!}$$

$$\frac{1}{(n + j_{sa}^s - s - j_s)!}$$

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$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa}^s = j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s = 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned} z S_{j_s, j_i}^{DOSD} &= \sum_{k=1}^{l-1} \sum_{(j_s=2)}^{(l_i+n-D-s)} \sum_{j_i=l_i+n-D}^{l_i-k+1} \\ &\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}} \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \\ &\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \\ &\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\ &\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \\ &\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \end{aligned}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{i-1} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{sa}-k-j_{sa}+2)} \sum_{j_i=j_s+s-1}^{l_i-k+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-1}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_s - j_i + 1)!} \cdot$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_i + j_s - n_s - j_i)!} \cdot$$

$$\frac{(n_s - j_i - n - 1)!}{(n_s - j_i - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_i - j_s - k - 1)!}{(l_i - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s - l_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=i}^{()} \sum_{(j_s=1)}^{l_i - i + 1} \sum_{j_i=l_i+n-D}$$

$$\sum_{n_i=n+k}^n \sum_{(n_s=n-j_i+1)}^{(n_i-j_i-k+1)}$$

$$\frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

GÜLDEN

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{sa}-k-j_{sa}+2)} \sum_{j_i=j_s+s-1} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{()} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_{sa}^s-k)}^{()} \frac{(2 \cdot n_{ik} + j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - s - k - 2 \cdot j_{sa}^s)!}{(2 \cdot n_{ik} + 2 \cdot j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - s - k - 2 \cdot j_{sa}^s)!} \cdot \frac{1}{(n + k - s - j_s)!} \cdot \frac{(l_s - k)}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^k + l_{is} = l_s \wedge l_s + j_{sa}^{ik} - j_{sa}^s > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + 1 - n + 1 \wedge$$

$$D \geq l_i < n \wedge l_i = k \geq 1 \wedge$$

$$j_{sa}^s = j_{sa}^i \wedge$$

$$s: \{j_{sa}^i, j_{sa}^s\} \wedge$$

$$s = 2 \wedge s = n + k \wedge$$

$$l_i \Rightarrow$$

$$fz_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(j_i-s+1)} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{ik}+s-k-j_{sa}^{ik}+1}$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-l_k} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=2}^{i^{l-1} (l_{ik} - j_{sa}^{ik} + 2)} \sum_{j_i=l_{ik}+s-k-j_{sa}^{ik}+1}^{l_{sa}+s-k-j_{sa}+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-l_k} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +
 \end{aligned}$$

GÜLDENWA

$$\begin{aligned}
 & \sum_{k=1}^{D+l_s+s-n} \sum_{(j_s=1)}^{()} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{sa}+s-i^{l-j_{sa}+1}} \\
 & \sum_{n_i=n+k}^n \sum_{(n_s=n-j)}^{(n_i-j_i-k+1)} \\
 & \frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n_s - 1)! \cdot (n_s - j_i)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s - 1)! \cdot (j_i - s)!} \cdot \\
 & \frac{(n - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{D+l_s+s-n} \sum_{(j_s=1)}^{()} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{ik}+s-k-j_{sa}^{ik}+1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{()} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-k)}^{(n_i-j_s+1)} \\
 & \frac{(2 \cdot n_{ik} + j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - s - 2 \cdot k - 2 \cdot j_{sa}^s)!}{(2 \cdot n_{ik} + 2 \cdot j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - n - 2 \cdot k - 3 \cdot j_{sa}^s)!} \cdot \\
 & \frac{1}{(n + j_{sa}^s - s - j_s)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge I = k \geq 0 \wedge$$

$$j_{sa}^s = j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, k, j_{sa}^i\} \wedge$$

$$s = 2 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$fz S_{j_s^i}^{DOSD} = \sum_{k=1}^{i-1} \sum_{l=2}^{(l_{sa}+n-D-j_{sa}^{ik})} \sum_{j_s=j_s+1}^{(l_{sa}+s-k-j_{sa}+1)} \sum_{n_i=n+k}^n \sum_{n_{is}=n+k-j_s+1}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{(n_{is}+j_s-j_i-k)}$$

$$\frac{(n_i - n_{is} - 1)!}{(i - l)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{i-1} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j_i=j_s+s-1}^{(l_{sa}+s-k-j_{sa}+1)}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{(n_{is}+j_s-j_i-k)}$$

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$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - 1)!}{(j_s + l_i - j_i - 1)! \cdot (j_i - j_s + 1)!}$$

$$\frac{(n - l_i)!}{(n - j_i - 1)! \cdot (n - j_i)!}$$

$$\sum_{j_s=1}^{l_s} \sum_{j_i=l_s+n+s-D-j_s}^{n-l_s} \sum_{j_a=1}^{l_s} \sum_{j_a+1}^{n-l_s}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_s=n-j_i+1)}^{(n_i-j_i-k+1)}$$

$$\frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j_i=j_s+s-1}^{n-l_s}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}} \sum_{()}^{()} (n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-k)$$

$$\frac{(2 \cdot n_{ik} + j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - s - 2 \cdot k - 2 \cdot j_{sa}^s)!}{(2 \cdot n_{ik} + 2 \cdot j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - n - 2 \cdot k - 3 \cdot j_{sa}^s)!}$$

$$\frac{1}{(n + j_{sa}^s - s - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (l_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - l_i)!}$$

$$((D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1)) \wedge$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1)) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1)) \wedge$$

$$D \geq n < n \wedge I = k \geq 0 \wedge$$

$$j_{sa}^s = j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, k, j_{sa}^i\} \wedge$$

$$s = 2 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$f_z^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(j_i-s+1)} \sum_{j_i=l_{sa}+n+s-D-j_s}^{l_s+s-k} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(l_s-k+1)} \sum_{j_i=l_s+s-k+1}^{l_{sa}+s-k-j_{sa}+1} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

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$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{l_i} \sum_{(j_s=1)}^{l_{sa}+s-k-l_{jsa}+1} \sum_{i=l_{sa}+n+l_{jsa}-D-j_{sa}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_s=n-j_i+1)}$$

$$\frac{(n_i - n_s - j_i + 1)!}{(j_i - n_s - 1)! \cdot (n_i - n_s - j_i + 1)!}$$

$$\frac{(n_s - j_i - n - 1)! \cdot (n - j_i)!}{(n_s - j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_i - l_s + 1)! \cdot (j_i - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

$$\sum_{k=1}^{l_s+s-n-l_i} \sum_{(j_s=j_i-s+1)}^{l_s+s-k} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_i=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^{ik})}^{(n_s-n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^{ik})}$$

$$\frac{(2 \cdot n_{ik} + j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - s - 2 \cdot l_k - 2 \cdot j_{sa}^s)!}{(2 \cdot n_{ik} + 2 \cdot j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - n - 2 \cdot l_k - 3 \cdot j_{sa}^s)!}$$

$$\frac{1}{(n + j_{sa}^s - s - j_s)!}$$

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$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \wedge$$

$$D \geq n < n \wedge l = k \geq 1 \wedge$$

$$j_{sa}^s = j_{sa}^l - s$$

$$s: \{l_{sa}, l_{sa}^i\} \wedge$$

$$s = 2 \wedge s = l_{sa} + k \wedge$$

$$k \geq 1 \Rightarrow$$

$$fz S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(l_{sa}+n-D-j_{sa})} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{sa}+s-k-j_{sa}+1}$$

$$\begin{aligned}
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=0}^{i^{l-1}} \sum_{j_i=j_s+1}^{(l_s-1)} \sum_{j_i=j_s+1}^{l_{sa}+s-k-j_{sa}+1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +
 \end{aligned}$$

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$$\begin{aligned}
 & \sum_{k=1}^l \sum_{(j_s=1)}^{()} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{sa}+s-i^{l-j_{sa}+1}} \\
 & \sum_{n_i=n+k}^n \sum_{(n_s=n-j)}^{(n_i-j_i-k+1)} \\
 & \frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n_s - 1)! \cdot (n_s - j_i)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s - 1)! \cdot (j_i - s)!} \cdot \\
 & \frac{(n - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{D+l_s+s-n} \sum_{(j_s=1)}^{(l_s-n)} \sum_{j_i=j_s+s-1}^{(n-D-j_{sa}+1)} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^{ik})}^{()} \\
 & \frac{(n_{ik} + j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - s - 2 \cdot k - 2 \cdot j_{sa}^s)!}{(2 \cdot n_{ik} + 2 \cdot j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - n - 2 \cdot k - 3 \cdot j_{sa}^s)!} \cdot \\
 & \frac{1}{(n + j_{sa}^s - s - j_s)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s > 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z^{DOSD}_{j_s, j_i} = \sum_{k=1}^{D-n+1} \sum_{j_i=l_i+n-D-j_{sa}^{ik}+1}^{(j_i-s+1)} \sum_{j_i=l_i+n-D}^{l_{ik}-j_{sa}^{ik}+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s)} \sum_{n_s=n-j_i+1}^{n_i+j_s-j_i-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n - n_s - \mathbb{k} - 1)!}{(j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{D-n+1} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j_i=l_{ik}+s-k-j_{sa}^{ik}+2}^{l_i-k+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}}$$

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$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i - 1)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - 1)!}{(j_s + l_i - j_i - 1)! \cdot (j_i - j_s - 1)!} \cdot \frac{(n - l_i)!}{(n - j_i - 1)! \cdot (n - j_i)!} \cdot \sum_{k=0}^{l_s + s - n - 1} \binom{n}{j_s = j_i - k} \sum_{j_i = l_i + n - D}^{j_{sa}^{ik} + 1} \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik}} \binom{n_s}{n_s = n_{ik} + j_s + j_{sa}^{ik} - j_i - j_{sa}^s - \mathbb{k}} \cdot \frac{(2 \cdot n_{ik} + j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - s - 2 \cdot \mathbb{k} - 2 \cdot j_{sa}^s)!}{(n_{ik} + j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - n - 2 \cdot \mathbb{k} - 3 \cdot j_{sa}^s)!} \cdot \frac{1}{(n + j_{sa}^s - s - j_s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s > 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z^{SDOSD}_{j_s, j_i} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{ik}+n-j_s+1)}^{(l_i+n-D-s)} \sum_{j_i=l_{ik}+n-D}^{l_i-k+1} \sum_{n_i=n+lk-j_s+1}^n \sum_{n_s=n-j_i+1}^{n_i-j_i-lk} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} + j_s + 1)!} \cdot \frac{(n_i - n_{is} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{D-n+1} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j_i=j_s+s-1}^{l_i-k+1} \sum_{n_i=n+lk}^n \sum_{(n_{is}=n+lk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-lk} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!}$$

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$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s - 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+1, \dots, D-s+1)}^{(l_{ik}-l_i+1, \dots, l_i+2)} \sum_{j_i=j_s+1}^{n} \sum_{n_i=n+k}^{n} \sum_{(n_{is}=n-k, \dots, n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{is}=n_{ik}+j_{sa}^s-j_{sa}^{ik}, \dots, n_{is}=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-k)}^{(\cdot)} \frac{(n_{ik} + j_{sa}^s - 2 \cdot j_{sa}^{ik} - n_s - j_i - n - s - 2 \cdot k - 2 \cdot j_{sa}^s)!}{(n_{ik} + 2 \cdot j_{sa}^s - 2 \cdot j_{sa}^{ik} - n_s - j_i - n - 2 \cdot k - 3 \cdot j_{sa}^s)!} \cdot \frac{1}{(n + j_{sa}^s - s - j_s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s = D - n + 1 \wedge$$

$$2 \leq j_s \leq j_s - s + 1 \wedge$$

$$j_i + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k, j_{sa}^i\} \wedge$$

$$s > 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$fz_{j_s, j_i}^{DOSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(j_i-s+1)} \sum_{j_i=l_{ik}+n+s-D-j_s^{ik}}^{l_s+s-k}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_s - l_s + 1)!}{(j_s + j_i - l_s - 1)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)} \sum_{j_i=l_s+s-k+1}^{l_{ik}+s-k-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_i-s+1)}^{(\cdot)} \sum_{j_i=l_{ik}+n+s-D-j_{sa}^{ik}}$$

$$\sum_{n_i=n_{i_1}+\dots+n_{i_s}}^n \sum_{n_{i_1}+\dots+n_{i_s}=n+j_s+1}^{(\cdot)} \sum_{n_{i_1}+\dots+n_{i_s}=n+j_s+1}^{(\cdot)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}} \sum_{n_{ik}+j_{sa}^{ik}=j_i-j_{sa}^{ik}-\mathbb{k}}$$

$$\frac{(2 \cdot n_{ik} + j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - s - 2 \cdot \mathbb{k} + j_{sa}^s)!}{(2 \cdot n_{ik} + 2 \cdot j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - s - 2 \cdot \mathbb{k} - 3 \cdot j_{sa}^s)!}$$

$$\frac{1}{(n + j_{sa}^s - s - j_s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D > n < n_{i_1} > D - l_i + 1 \wedge$$

$$2 \leq i_c \leq j_i - s + 1 \wedge$$

$$j_c + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 \leq l_c \wedge l_{ik} - j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D > n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s > 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned}
 f_{zS}^{DOSD}_{j_s, j_i} &= \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_{ik}+n-D-j_s^{ik})} \sum_{j_i=l_{ik}+n+s-D-j_s^{ik}}^{l_{ik}+s-k-j_s^{ik}+1} \\
 &\quad \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i-k}^{n_{is}+j_s-j_i-k} \\
 &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 &\quad \frac{(n_{is} - n_s - k - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - k)!} \cdot \\
 &\quad \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 &\quad \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 &\quad \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 &\quad \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!} + \\
 &\quad \sum_{k=1}^{n+1} \sum_{(j_s=l_{ik}+n-D-j_s^{ik}+1)}^{(l_s-k+1)} \sum_{j_i=j_s+s-1}^{l_{ik}+s-k-j_s^{ik}+1} \\
 &\quad \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k} \\
 &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 &\quad \frac{(n_{is} - n_s - k - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - k)!} \cdot \\
 &\quad \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 &\quad \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 &\quad \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot
 \end{aligned}$$

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$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_s-k+1)} \sum_{j_i=j_s+s-1} \sum_{n_i=n+k}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik})}^{(n_{ik}+j_s+j_{sa}^{ik}-j_i-k)} \frac{(2 \cdot n_{ik} + j_s + 2 \cdot j_{sa}^{ik} - n - j_i - s - k - 2 \cdot j_{sa}^s)!}{(2 \cdot n_{ik} + 2 \cdot j_s + 2 \cdot j_{sa}^{ik} - n - j_i - s - k - 3 \cdot j_{sa}^s)!} \frac{(n + j_{sa}^s - s - j_s)!}{(l_s - k - 1)!} \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\begin{aligned} & ((D \geq n < n \wedge l_s > D - n + 1) \wedge \\ & 2 \leq j_s \leq j_i - s + 1 \wedge \\ & j_s + s - 1 \leq j_i \leq n \wedge \\ & l_{ik} = j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik}) \vee \\ & ((D \geq n < n \wedge l_s > D - n + 1) \wedge \\ & 2 \leq j_s \leq j_i - s + 1 \wedge \\ & j_s + s - 1 \leq j_i \leq n \wedge \\ & l_{ik} = j_{sa}^{ik} - 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik}) \vee \\ & (D \geq n < n \wedge l_s > D - n + 1 \wedge \\ & 2 \leq j_s \leq j_i - s + 1 \wedge \\ & j_s + s - 1 \leq j_i \leq n \wedge \end{aligned}$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik}) \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k, j_{sa}^i\} \wedge$$

$$s > 2 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$fz S_{j_s j_i}^{DOSD} = \sum_{k=1}^{D-n+1} \sum_{\substack{(j_s-s+1) \\ (j_s+n-D) \\ j_i=l_i+s-k}}^{s-k} \frac{\sum_{n_i=n+k}^{(n_i-j_s+1)} \sum_{n_{is}=n+k-j_s}^{n_{is}+j_s-j_i-k} \sum_{n_s=n-j_i+1}^{j_i+1}}{(j_s-2)! \cdot (n_i-n_{is}-1)!} \cdot \frac{(n_{is}-n_s-k-1)!}{(j_i-1)! \cdot (n_{is}+j_s-n_s-j_i-k)!} \cdot \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \frac{(l_i-l_s-s+1)!}{(j_s+l_i-j_i-l_s)! \cdot (j_i-j_s-s+1)!} \cdot \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)} \sum_{j_i=l_s+s-k+1}^{l_i-k+1} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k} \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!}$$

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$$\frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!} \cdot$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot$$

$$\frac{(l_i)!}{(D + j_i - n - l_i)! \cdot (j_i)!} \cdot$$

$$\sum_{n_i=n+1}^{D+l_s+s-n-l_i} \sum_{n_{is}=n+\mathbb{k}-j_s+1}^{l_s+s-n} \binom{n}{n_i} \binom{n_{is}}{n_{is}+j_s+1} \binom{l_s+s-n}{n_{is}+j_s+1} \binom{l_i+n-D}{n_{is}+j_s+1}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}}^{()} \binom{n_s}{n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^{ik}-\mathbb{k}}$$

$$\frac{(2 \cdot n_{ik} + j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - s - 2 \cdot \mathbb{k} - 2 \cdot j_{sa}^s)!}{(2 \cdot n_{ik} + 2 \cdot j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - n - 2 \cdot \mathbb{k} - 3 \cdot j_{sa}^s)!} \cdot$$

$$\frac{1}{(n + j_{sa}^s - s - j_s)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$l_i + j_s - 1 \leq j_i \leq n \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik})) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}^i\}$$

$$s > 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$fz S_{j_s}^{SD} = \sum_{k=1}^{D-n} \sum_{j_s=l_s+n-D}^{(l_i+n-D-s)} \sum_{j_i=l_i+n-D}^{l_i-k+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\begin{aligned}
 & \sum_{k=1}^{D-n+1} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)} \sum_{j_i=j_s+s-1}^{l_i-k+1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - k - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} - n_s - k - 1)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - j_s - k + 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - l_s)! \cdot (n - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D - l_i - n - l_i)! \cdot (n - j_i)!} \\
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)} \sum_{j_i=j_s+s-1} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^n \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-k)}^{(n_i-j_s+1)} \\
 & \frac{(2 \cdot n_{ik} + j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - s - 2 \cdot k - 2 \cdot j_{sa}^s)!}{(2 \cdot n_{ik} + 2 \cdot j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - n - 2 \cdot k - 3 \cdot j_{sa}^s)!} \cdot \\
 & \frac{1}{(n + j_{sa}^s - s - j_s)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}
 \end{aligned}$$

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$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq j_s \leq j_i - s + 1 \wedge$

$j_s + s - 1 \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$

$D \geq n < n \wedge l = k > 0 \wedge$

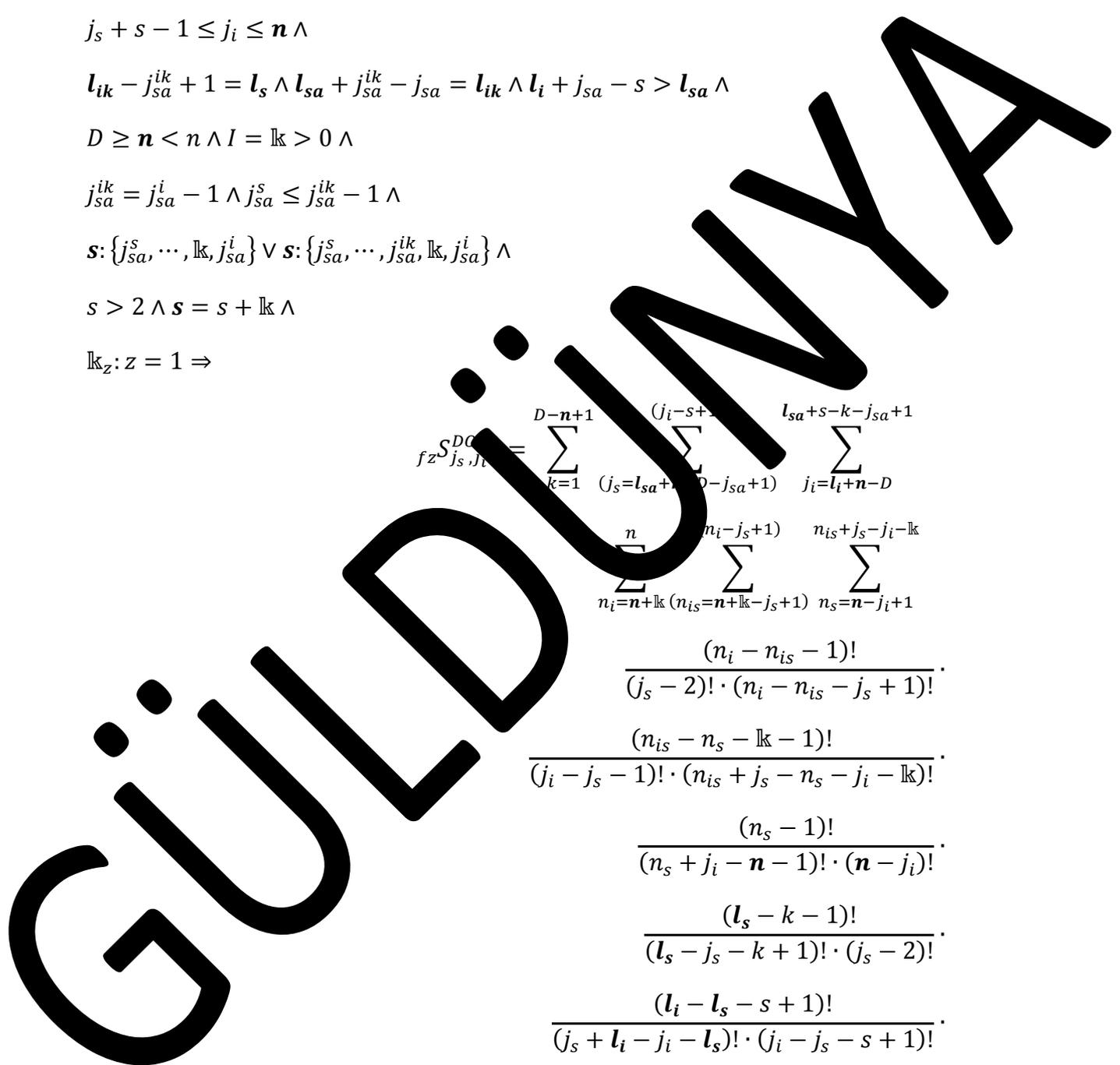
$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \dots, k, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k, j_{sa}^i\} \wedge$

$s > 2 \wedge s = s + k \wedge$

$k_z: z = 1 \Rightarrow$

$$fzS_{j_s, j_i}^{DG} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(j_i-s+1)} \sum_{j_i=l_i+n-D}^{l_{sa}+s-k-j_{sa}+1} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - k - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - k)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_{sa}-k-j_{sa}+2)} \sum_{j_i=l_{sa}+s-k-j_{sa}+2}^{l_i-k+1}$$



$$\begin{aligned}
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - 1)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(1 - l_s - s - 1)!}{(j_s + l_i - 1 - l_s - 1 - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{s=1}^{D+l_s+s-n-l_i} \sum_{j_i=j_i-s+1}^{()} \sum_{j_i=l_i+n-D}^{l_{sa}+s-k-j_{sa}+1} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^{ik})}^{()} \\
 & \frac{(2 \cdot n_{ik} + j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - s - 2 \cdot \mathbb{k} - 2 \cdot j_{sa}^s)!}{(2 \cdot n_{ik} + 2 \cdot j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - n - 2 \cdot \mathbb{k} - 3 \cdot j_{sa}^s)!} \cdot \\
 & \frac{1}{(n + j_{sa}^s - s - j_s)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k, j_{sa}^i\} \wedge$$

$$s > 2 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$\sum_{k=1}^{D-n+1} \sum_{(j_s=l_{sa}-D-j_{sa}+1)}^{(l_{sa}-k-j_{sa}+2)} \sum_{j_i=j_s+s-1}^{l_i-k+1} \frac{\sum_{n_i=n+k}^n \sum_{n_s=n+k-j_s+1}^{(n_i-j_s)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k}}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)! \cdot (n_{is}-n_s-k-1)! \cdot (n_i-j_s-1)! \cdot (n_{is}+j_s-n_s-j_i-k)! \cdot (n_s-1)! \cdot (n_s+j_i-n-1)! \cdot (n-j_i)! \cdot (l_s-k-1)! \cdot (l_s-j_s-k+1)! \cdot (j_s-2)! \cdot (l_i-l_s-s+1)! \cdot (j_i-j_s-s+1)! \cdot (D-l_i)! \cdot (D+j_i-n-l_i)! \cdot (n-j_i)!} +$$

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$$\begin{aligned}
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - 1)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_s - s - 1)!}{(j_s + l_i - n - l_s - j_i - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{i=1}^{D+l_s+s-n-l_i} \sum_{j_s=l_i+n-D-s+1}^{j_{sa}-k-j_{sa}+2} \sum_{j_i=j_s+s-1}^n \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{()} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-\mathbb{k})}^{()} \\
 & \frac{(2 \cdot n_{ik} + j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - s - 2 \cdot \mathbb{k} - 2 \cdot j_{sa}^s)!}{(2 \cdot n_{ik} + 2 \cdot j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - n - 2 \cdot \mathbb{k} - 3 \cdot j_{sa}^s)!} \cdot \\
 & \frac{1}{(n + j_{sa}^s - s - j_s)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s > 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$fz_{j_s, j_i}^{DOSD} = \sum_{k=1}^{D-n+1} \sum_{j_s=l_{ik}+n-D-j_{sa}^{ik}+1}^{(j_i-s+1)} \sum_{j_i=l_{ik}+s-k-j_{sa}^{ik}+1}^{l_{ik}+s-k-j_{sa}^{ik}+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{n_s=n+\mathbb{k}-j_s+1}^{n_i+j_s-j_i-\mathbb{k}} \sum_{n_s=n-j_i+1}^{n_i+j_s-j_i-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(i - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

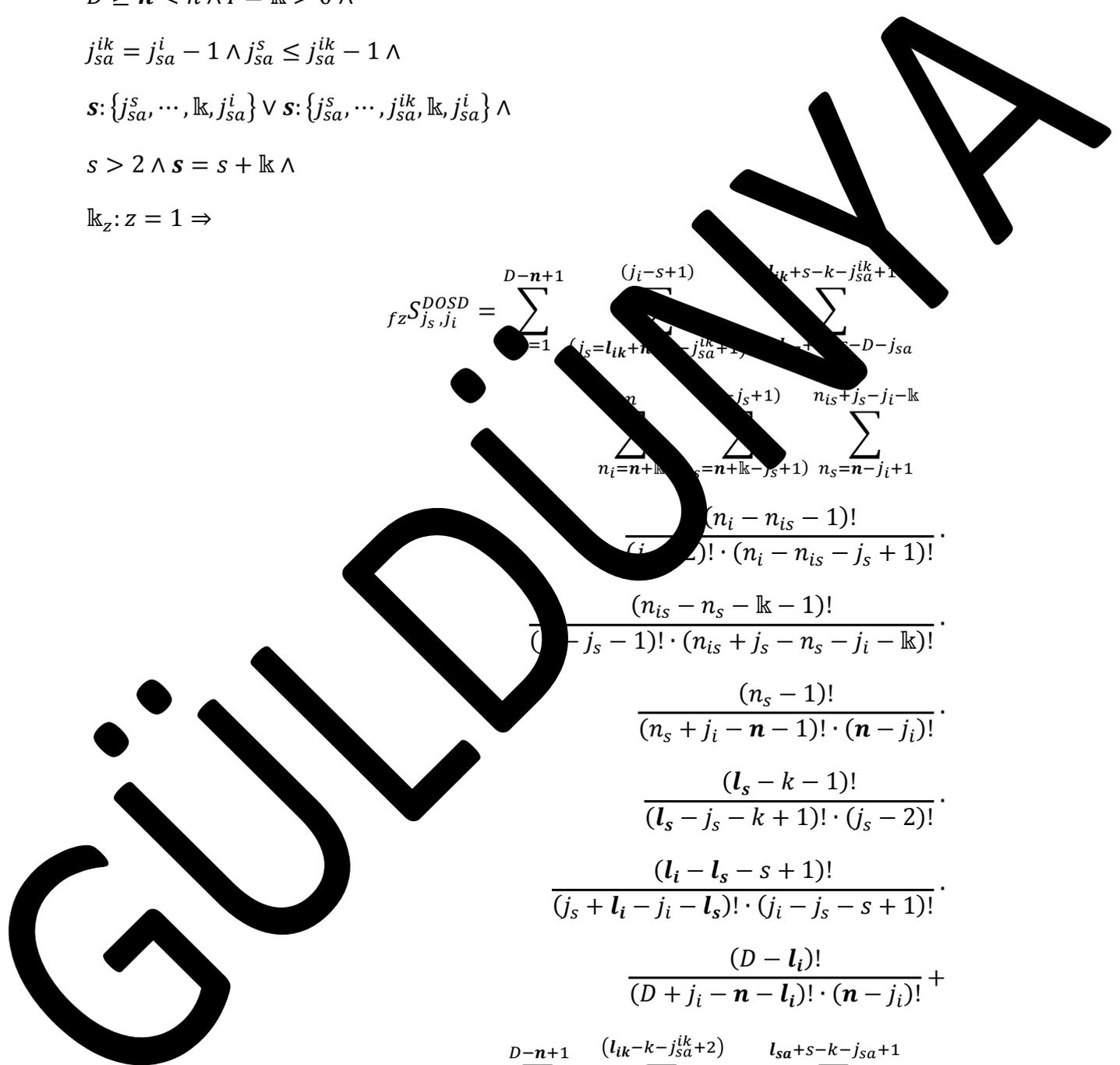
$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{D-n+1} \sum_{j_s=l_{ik}+n-D-j_{sa}^{ik}+1}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j_i=l_{ik}+s-k-j_{sa}^{ik}+2}^{l_{sa}+s-k-j_{sa}+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{n_{is}=n+\mathbb{k}-j_s+1}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}}$$



$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i - 1)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - 1)!}{(j_s + l_i - j_i - 1)! \cdot (j_i - j_s - 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{k=1}^{D+n-l_i} \sum_{j_i-s+1}^{n-l_i} \sum_{l_{sa}+n+s-D-j_{sa}}^{n_{ik}+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-\mathbb{k})} \frac{(2 \cdot n_{ik} + j_s^s + 2 \cdot j_{sa}^{ik} - n_s - j_i - s - 2 \cdot \mathbb{k} - 2 \cdot j_{sa}^s)!}{(2 \cdot n_{ik} + j_s^s + 2 \cdot j_{sa}^{ik} - n_s - j_i - n - 2 \cdot \mathbb{k} - 3 \cdot j_{sa}^s)!} \cdot \frac{1}{(n + j_{sa}^s - s - j_s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$

$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}^i\} \vee \mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}^i\} \wedge$

$s > 2 \wedge \mathbf{s} = s + \mathbb{k} \wedge$

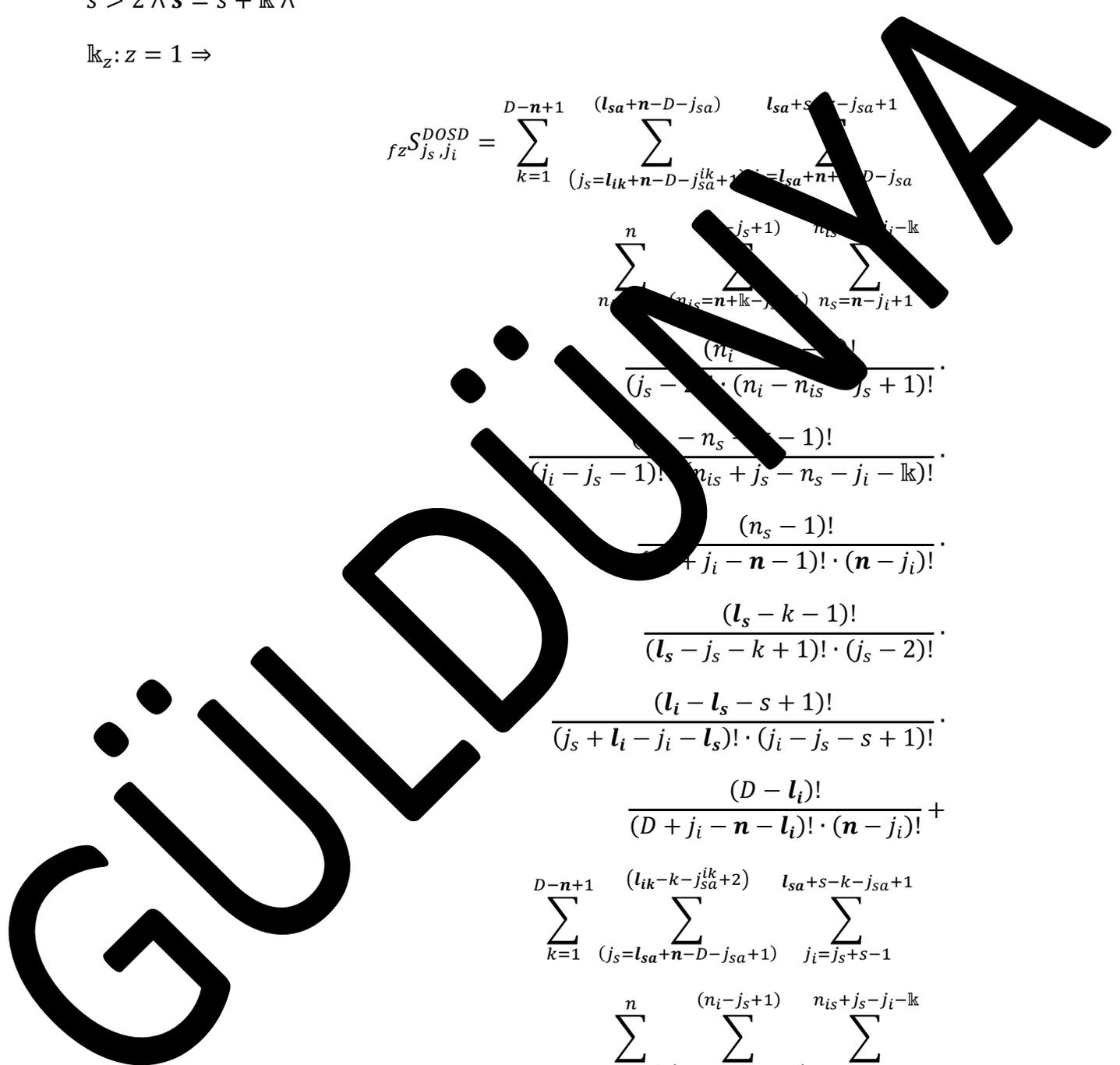
$\mathbb{k}_z: z = 1 \Rightarrow$

$$f_z S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{D-n+1} \sum_{j_s=l_{ik}+n-D-j_{sa}^{ik}+1}^{(l_{sa}+n-D-j_{sa})} \sum_{j_i=l_{sa}+s-k-j_{sa}+1}^{l_{sa}+s-k-j_{sa}+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{n_{is}=n+\mathbb{k}-j_s+1}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!} \cdot \frac{(n_s - 1)!}{(j_i + j_s - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{D-n+1} \sum_{j_s=l_{sa}+n-D-j_{sa}+1}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j_i=j_s+s-1}^{l_{sa}+s-k-j_{sa}+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{n_{is}=n+\mathbb{k}-j_s+1}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!}$$



$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{j_s=l_{sa}+n}^{(l_{ik}-k-1) \wedge (j_s+1)} \sum_{j_i=j_s+1}^{n} \sum_{n_i=n+k}^{(n_i-j_s+1)} \sum_{n_{is}=n+k}^{(n_{is}-j_s+1)} \sum_{n_{is}=n_{ik}+j_{sa}^s-j_{sa}^{ik}}^{(n_{is}-j_s+1)} \sum_{n_{is}=n_{ik}+j_{sa}^s-j_{sa}^{ik}}^{(n_{is}-j_s+1)} \frac{(n_{ik} + j_{sa}^s - 2 \cdot j_{sa}^{ik} - n_s - j_i - n - s - 2 \cdot k - 2 \cdot j_{sa}^s)!}{(n_{ik} + 2 \cdot j_{sa}^s - 2 \cdot j_{sa}^{ik} - n_s - j_i - n - 2 \cdot k - 3 \cdot j_{sa}^s)!} \cdot \frac{1}{(n + j_{sa}^s - s - j_s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n_s) \wedge (l_s - n_s > -n + 1) \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

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$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s > 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_{z, j_i}^{DOSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(j_i-s-k)} \sum_{l_{sa}+n+s-D-j_{sa}}^{l_s+s-k} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{(n_{is}+j_s-j_i-\mathbb{k})}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)} \sum_{j_i=l_s+s-k+1}^{l_{sa}+s-k-j_{sa}+1}$$

$$\begin{aligned}
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - 1)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_s - s - 1)!}{(j_s + l_i - l_s - s + 1)! \cdot (i_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=0}^{n+l_s+s-n-l_i} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_s+s-k} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^{ik})}^{()} \\
 & \frac{(2 \cdot n_{ik} + j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - s - 2 \cdot \mathbb{k} - 2 \cdot j_{sa}^s)!}{(2 \cdot n_{ik} + 2 \cdot j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - n - 2 \cdot \mathbb{k} - 3 \cdot j_{sa}^s)!} \cdot \\
 & \frac{1}{(n + j_{sa}^s - s - j_s)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}^i\} \vee s: \{j_{sa}^s, j_{sa}^{ik}, \mathbb{k}, j_{sa}^i\}$$

$$s > 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned} \overset{DOSD}{j_s, j_i} &= \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_{sa}+n-D-j_{sa})} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{sa}+s-k-j_{sa}+1} \\ &\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}} \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ &\frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!} \cdot \\ &\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \end{aligned}$$

$$\begin{aligned}
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_s-k-1)} \sum_{j_i=j_s+s-1}^{l_{sa}+s-k-j_{sa}+1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+k}^{(n_i-j_s+1)} \\
 & \frac{(n_{is}-1)!}{(j_s - 1)! \cdot (n_i - n_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - k - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - k)!} \cdot \\
 & \frac{(n_s - 1)!}{(n - j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} - \\
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_s-k-1)} \sum_{j_i=j_s+s-1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-k)}^{()}
 \end{aligned}$$

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$$\frac{(2 \cdot n_{ik} + j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - s - 2 \cdot \mathbb{k} - 2 \cdot j_{sa}^s)!}{(2 \cdot n_{ik} + 2 \cdot j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - n - 2 \cdot \mathbb{k} - 3 \cdot j_{sa}^s)!}$$

$$\frac{1}{(n + j_{sa}^s - s - j_s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!}$$

$$\frac{(D - l_s)!}{(D + j_i - n - l_s)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$l_i \leq D + s - n \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}^i\} \vee s: \{j_{sa}^s, j_{sa}^{ik}, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s > 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$fz S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i^{l-1} (j_i - s + 1)} \sum_{(j_s=2)}^{l_{ik} + s - k - j_{sa}^{ik} + 1} \sum_{j_i = s + 1}^{n_i + j_s - j_i - \mathbb{k}}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_s = n - j_i + 1}^{n_i + j_s - j_i - \mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\begin{aligned}
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{i l - 1} \sum_{(j_s=2)}^{(l_{ik} - k - j_{sa}^{ik} + 2)} \sum_{i=l_{ik}+s-1}^{l_{ik}+1} \sum_{j_{sa}^{ik}+2}^{j_{sa}^{ik}+1} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-1)}^{(j_s+1)} \sum_{n_s=n-j_i+1}^{j_i-\mathbb{k}} \\
 & \frac{(n_i - n_s - \mathbb{k} - 1)!}{(j_s - 1)! \cdot (n_i - n_s - j_s + 1)!} \cdot \\
 & \frac{(n_i - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=i}^l \sum_{(j_s=1)}^{l_i - i l + 1} \sum_{j_i=s}^{l_i - i l + 1} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_s=n-j_i+1)}^{(n_i - j_i - \mathbb{k} + 1)} \\
 & \frac{(n_i - n_s - \mathbb{k} - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i - \mathbb{k} + 1)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot
 \end{aligned}$$

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$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$\sum_{k=1}^{i^{l-1}} \sum_{(j_s=j_i-s+1)}^{(\)} \sum_{j_i=s+1}^{l_{ik}+s-k-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+1}^n \sum_{(n+j_s+1)}^{(n+j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}+j_s+1}^{(\)} \sum_{(n_{ik}+j_s+1-j_i-j_{sa}^{ik})}$$

$$\frac{(2 \cdot n_{ik} + j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - s - 2 \cdot k - j_{sa}^s)!}{(2 \cdot n_{ik} + 2 \cdot j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - s - 2 \cdot k - 3 \cdot j_{sa}^s)!}$$

$$\frac{1}{(n + j_{sa}^s - s - j_s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=i^l}^{(\)} \sum_{(j_s=1)} \sum_{j_i=s}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{ik}=n_i-j_s-j_{sa}^{ik})}^{(\)} \sum_{n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^{ik}}$$

$$\frac{(2 \cdot n_{ik} + j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - s - 2 \cdot k - 2 \cdot j_{sa}^s)!}{(2 \cdot n_{ik} + 2 \cdot j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - n - 2 \cdot k - 3 \cdot j_{sa}^s)! \cdot (n - s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$D \geq n < n \wedge l_i \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_i - s + 1 \wedge$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k, j_{sa}^i\} \wedge$$

$$s > 2 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$fz_{j_s, j_i}^{SDOSD} = \sum_{k=1}^{l-1} \sum_{j_i=j_s+s-1}^{n-k-j_{sa}^{ik}+1} \sum_{n_i=n+k}^n \sum_{n_s=n-j_i+1}^{n_i-j_i-k} \frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n - n_s - k - 1)!}{(n - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - k)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=l}^l \sum_{j_s=1}^{l-l} \sum_{j_i=s}^{l-l+1}$$

$$\sum_{n_i=n+k}^n \sum_{n_s=n-j_i+1}^{n_i-j_i-k+1}$$

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$$\frac{(n_i - n_s - \mathbb{k} - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i - \mathbb{k} + 1)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - j_s - 1)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$\sum_{k=1}^{l-1} \sum_{i=2}^{l-k} \sum_{j_i=j_s+1}^{n_i-j_s+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{n_s=n_i+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-\mathbb{k}}$$

$$\sum_{n_s=n_i+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-\mathbb{k}} \sum_{n_s=n_i+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-\mathbb{k}}^{()}$$

$$\frac{(2 \cdot n_{ik} + j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - s - 2 \cdot \mathbb{k} - 2 \cdot j_{sa}^s)!}{(2 \cdot n_{ik} + 2 \cdot j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - n - 2 \cdot \mathbb{k} - 3 \cdot j_{sa}^s)!}$$

$$\frac{1}{(n + j_{sa}^s - s - j_s)!}$$

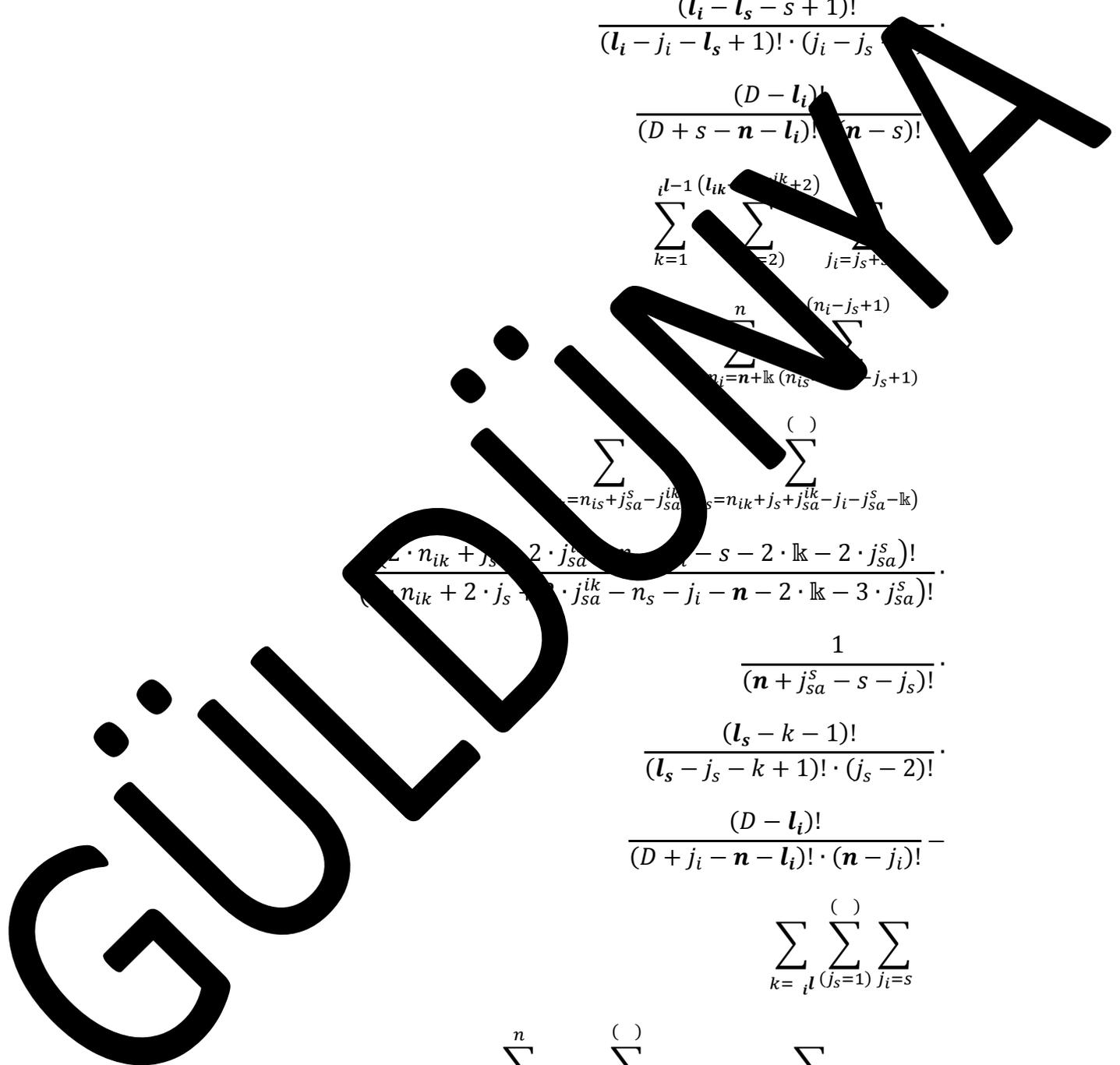
$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{l-1} \sum_{j_s=1}^{()} \sum_{j_i=s}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{n_s=n_i+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-\mathbb{k}}^{()} \sum_{n_s=n_i+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-\mathbb{k}}$$

$$\frac{(2 \cdot n_{ik} + j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - s - 2 \cdot \mathbb{k} - 2 \cdot j_{sa}^s)!}{(2 \cdot n_{ik} + 2 \cdot j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - n - 2 \cdot \mathbb{k} - 3 \cdot j_{sa}^s)! \cdot (n - s)!}$$



$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s > 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$j_{sa}^{DOSD} = \sum_{j_i=1}^{n-1} \sum_{(j_s=2)}^{j_i-s+1} \sum_{j_i=l_i+n-D}^{l_{ik}+s-k-j_{sa}^{ik}+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

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$$\begin{aligned}
 & \sum_{k=1}^{i^{l-1} (l_{ik-k-j_{sa}^{ik}+2)} } \sum_{(j_s=2)}^{l_i-k+1} \sum_{j_i=l_{ik+s-k-j_{sa}^{ik}+2}}^{l_i-k+1} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i}^{n_{is}+j_s-j_i-\mathbb{k}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - \mathbb{k})!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l_i - k + 1)!}{(j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_s - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^i \sum_{(j_s=1)}^{()} \sum_{j_i=l_i+n-D}^{l_i-i^{l+1}} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_s=n-j_i+1)}^{(n_i-j_i-\mathbb{k}+1)} \\
 & \frac{(n_i - n_s - \mathbb{k} - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i - \mathbb{k} + 1)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -
 \end{aligned}$$

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$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_i-s+1)}^{(\cdot)} \sum_{j_i=l_i+n-D}^{l_{ik}+s-k-j_{sa}^{ik}+1} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s^{ik})}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{(\cdot)} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_{sa}^{s-k})}^{(\cdot)} \frac{(2 \cdot n_{ik} + j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - s - 1 - 2 \cdot j_{sa}^s)!}{(2 \cdot n_{ik} + 2 \cdot j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - n - 2 \cdot k - j_{sa}^s)!} \cdot \frac{1}{(n + j_s - s - j_s)!} \cdot \frac{(l_s - k)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq l_i \wedge$$

$$l_i - j_{sa}^{ik} + 1 \leq l_s \wedge l_i - j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + 1 - n + 1 \wedge$$

$$D \geq n < n \wedge I = k > 1 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^i, \dots, k, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k, j_{sa}^i\} \wedge$$

$$s > 2 \wedge s = j_{sa}^i + k \wedge$$

$$k \geq 2 \Rightarrow$$

$$fzS_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(l_i+n-D-s)} \sum_{j_i=l_i+n-D}^{l_i-k+1}$$

$$\begin{aligned}
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{i=1}^{i^{l-1}} \sum_{s=l_i+n-D-s+1}^{k-k-j_s^{ik}+2} \sum_{j_i=j_s+s-1}^{l_i-k+1} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +
 \end{aligned}$$

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$$\begin{aligned}
 & \sum_{k=1}^{\binom{()}{l}} \sum_{(j_s=1)}^{l_i - l + 1} \sum_{j_i = l_i + n - D}^{n} \\
 & \sum_{n_i = n + k}^n \sum_{(n_s = n - j)}^{(n_i - j_i - k + 1)} \\
 & \frac{(n_i - n_s - k - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i - k + 1)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s - 1)! \cdot (j_i - s)!} \cdot \\
 & \frac{\binom{()}{l}}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{D + l_s + s - 1} \sum_{(j_i = l_i + n - D - s + 1)}^{(l_{ik} - k - j_{ik} + 2)} \sum_{j_i = j_s + s - 1}^n \\
 & \sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s + 1)}^{(n_i - j_s + 1)} \\
 & \sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik}}^{\binom{()}{l}} \sum_{(n_s = n_{ik} + j_s + j_{sa}^{ik} - j_i - j_{sa}^s - k)}^{(n_i - j_s + 1)} \\
 & \frac{(2 \cdot n_{ik} + j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - s - 2 \cdot k - 2 \cdot j_{sa}^s)!}{(2 \cdot n_{ik} + 2 \cdot j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - n - 2 \cdot k - 3 \cdot j_{sa}^s)!} \cdot \\
 & \frac{1}{(n + j_{sa}^s - s - j_s)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

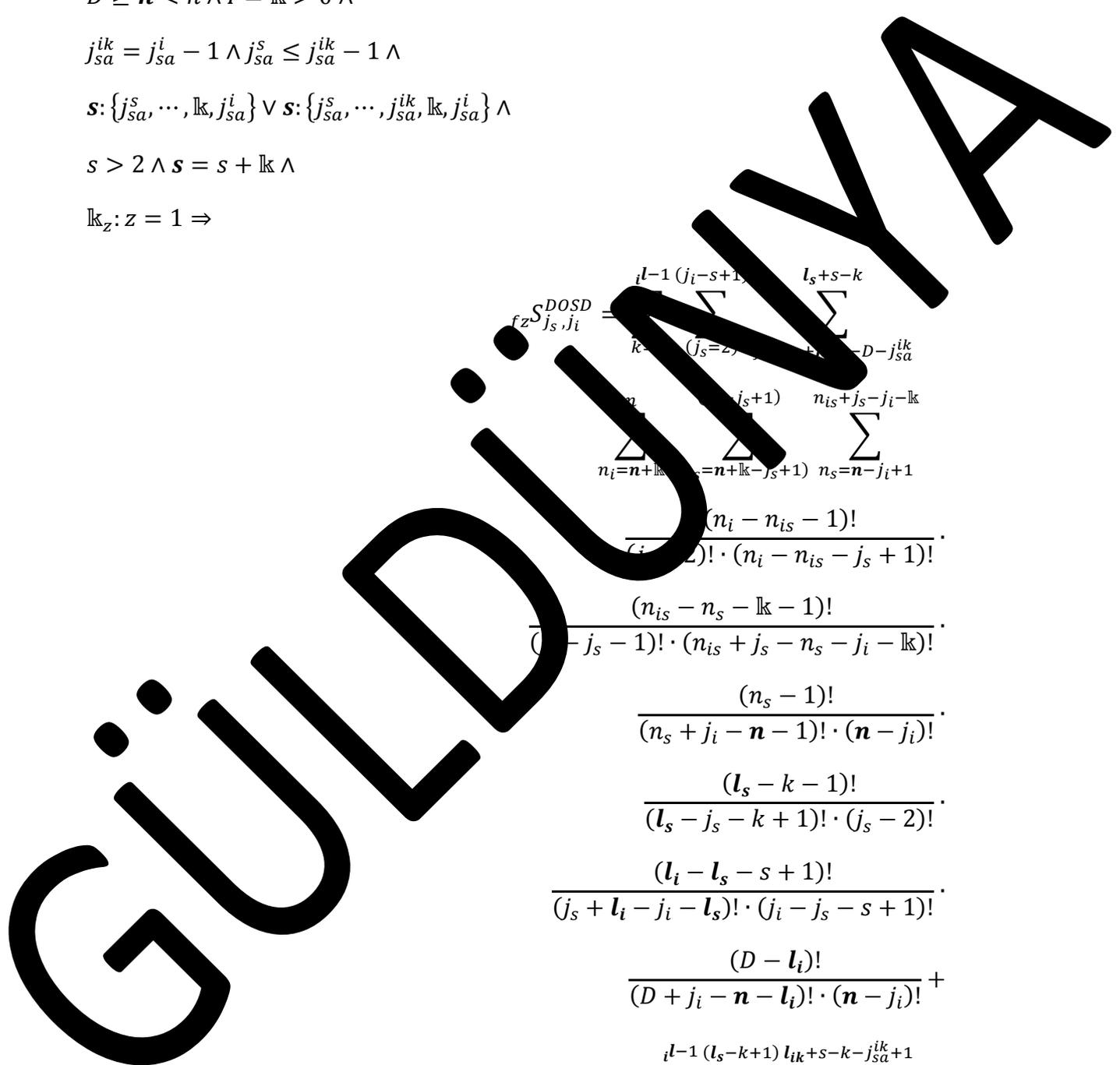
$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k, j_{sa}^i\} \wedge$$

$$s > 2 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$f_z^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(j_i-s+1)} \sum_{l_s=s-k}^{l_s+s-k} \sum_{n_i=n+k}^{n_i+j_s-1} \sum_{n_{is}=n+k-j_s+1}^{n_{is}+j_s-j_i-k} \sum_{n_s=n-j_i+1}^{n_s} \frac{(n_i - n_{is} - 1)!}{(i - l - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - k - 1)!}{(i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - k)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(l_s-k+1)} \sum_{j_i=l_s+s-k+1}^{l_{ik}+s-k-j_{sa}^{ik}+1} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k}$$



$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - s + 1)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(n - l_i)!}{(n - j_i - n + l_i)! \cdot (n - j_i)!}$$

$$\sum_{i=1}^n \sum_{j_s=1}^{n-l_{ik}} \sum_{j_i=l_{ik}+n+s-D-j_s a}^{n-l_{ik}+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_s=n-j_i+1)}^{(n_i-j_i-\mathbb{k}+1)}$$

$$\frac{(n_i - n_s - \mathbb{k} - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i - \mathbb{k} + 1)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_i-s+1)}^{()} \sum_{j_i=l_{ik}+n+s-D-j_s a}^{l_s+s-k}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^{i_s}-j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-\mathbb{k})} \frac{(2 \cdot n_{ik} + j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - s - 2 \cdot \mathbb{k} - 2 \cdot j_{sa}^s)!}{(2 \cdot n_{ik} + 2 \cdot j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - n - 2 \cdot \mathbb{k} - 3 \cdot j_{sa}^s)!} \cdot \frac{1}{(n + j_{sa}^s - s - j_{sa}^i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_i - s + 1 \wedge$

$j_s + s - 1 \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$

$D + s - n < l_i \leq D + l_s + s - n$

$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^{i_s}, \dots, \mathbb{k}, j_{sa}^i\} \vee \{j_{sa}^{i_s}, \dots, j_{sa}^s, \mathbb{k}, j_{sa}^i\}$

$s > 2 \wedge s = s - 1 + 1 \wedge$

$\mathbb{k}_z: z = 1 \Rightarrow$

$$fz_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(l_{ik}+n-D-j_{sa}^{ik})} \sum_{j_i=l_{ik}+n+s-D-j_{sa}^{ik}}^{l_{ik}+s-k-j_{sa}^{ik}+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!}$$

$$\begin{aligned}
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{i-1} \sum_{j_i=l_{ik}+n-D-j_s+1}^{(l_s-k+1)} \sum_{j_i=j_s+s-1}^{(l_s-k+1) \cdot (j_s+s-1) + i k_{s_a}+1} \\
 & \sum_{n_i=n+k}^{(n_i-j_s+1)} \sum_{n_i=n+k-j_s+1}^{(n_i-j_s+1)} \sum_{n_i=n-j_i+1}^{(n_i-j_s+1) \cdot (n_i+j_s-j_i-k)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - k - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - k)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{i-1} \sum_{j_i=l_{ik}+n+s-D-j_s}^{() \cdot l_{ik}+s-1} \sum_{j_i=l_{ik}+n+s-D-j_s}^{i-l-j_s^{ik}+1} \\
 & \sum_{n_i=n+k}^n \sum_{n_s=n-j_i+1}^{(n_i-j_i-k+1)} \\
 & \frac{(n_i - n_s - k - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i - k + 1)!}
 \end{aligned}$$

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$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_s-k+1)} \sum_{j_{sa}^{ik}=s-1}^{j_{sa}^{ik}=s-1}$$

$$\sum_{n_i=n}^n \sum_{n_{is}=n+l_k-j_s+1}^{n_{is}=n+l_k-j_s+1}$$

$$\sum_{n_{ik}=n_{is}}^{n_{ik}=n_{is}-j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^{ik})}$$

$$\frac{(2 \cdot n_{ik} + j_s - 2 \cdot j_{sa}^{ik} - n_s - s - 2 \cdot l_k - 2 \cdot j_{sa}^s)!}{(2 \cdot n_{ik} + 2 \cdot j_s + j_{sa}^{ik} - n_s - n - 2 \cdot l_k - 3 \cdot j_{sa}^s)!}$$

$$\frac{1}{(n + j_{sa}^s - s - j_s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + j_{sa}^{ik} = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$(j_s - n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s \leq j_i \leq n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$l_i \leq D + s - n)) \wedge$$

$$D \geq n < n \wedge l_i - s + 1 > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^s - k \wedge j_{sa}^s \leq j_i - k - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k, j_{sa}^i\} \quad s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}^s\} \wedge$$

$$s > z \quad s = s + k \wedge$$

$$k_z: z = 1 =$$

$$f_{z, j_s, j_i}^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(j_i-s+1)} \sum_{j_i=s+1}^{l_s+s-k}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 1)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(l_i)!}{(D + j_i - n - l_i)! \cdot (j_i)!} +$$

$$\sum_{k=1}^{i-1} \sum_{j_s=1}^{(l_s - k + 1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(i - 1)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{i-1} \sum_{j_s=1}^{(l_s - k + 1)} \sum_{j_i=s}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_s=n-j_i+1)}^{(n_i-j_i-\mathbb{k}+1)}$$

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$$\frac{(n_i - n_s - k - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i - k + 1)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - 1)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$\sum_{k=0}^{l_i - (n_i - j_i - s + 1)} \sum_{j_i = n_i - k}^{(n_i - j_i - s + 1) + s - k}$$

$$\sum_{n_i = n + k}^n \sum_{n_i = n + k}^{(n_i - j_s + 1)} (n_i - j_s + 1)$$

$$\sum_{n_i = n + k}^n \sum_{n_i = n + k}^{(n_i - j_s + 1)} \sum_{n_s = n_{ik} + j_s + j_{sa}^{ik} - j_i - j_{sa}^s - k}$$

$$\frac{(2 \cdot n_{ik} + j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - s - 2 \cdot k - 2 \cdot j_{sa}^s)!}{(2 \cdot n_{ik} + 2 \cdot j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - n - 2 \cdot k - 3 \cdot j_{sa}^s)!}$$

$$\frac{1}{(n + j_{sa}^s - s - j_s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=0}^{l_i} \sum_{j_s=1}^{(j_s)} \sum_{j_i=s}$$

$$\sum_{n_i = n + k}^n \sum_{n_i = n + k}^{(n_i - j_s - j_{sa}^{ik})} \sum_{n_s = n_{ik} + j_s + j_{sa}^{ik} - j_i - j_{sa}^s - k}$$

$$\frac{(2 \cdot n_{ik} + j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - s - 2 \cdot k - 2 \cdot j_{sa}^s)!}{(2 \cdot n_{ik} + 2 \cdot j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - n - 2 \cdot k - 3 \cdot j_{sa}^s)! \cdot (n - s)!}$$

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$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$((D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s$$

$$(l_i \leq D + s - n) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^l - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s > 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned}
 f_{j_s, j_i}^{S_{DOSD}} &= \sum_{k=1}^{i^{l-1} (l_s - k + 1)} \sum_{(j_s=2)}^{l_i - k + 1} \sum_{j_i = j_s + s - 1} \\
 &\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{i_s} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_s = n - j_i}^{n_{i_s} + j_s - j_i - \mathbb{k}} \\
 &\frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \\
 &\frac{(n_{i_s} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{i_s} + j_s - n_s - \mathbb{k})!} \cdot \\
 &\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 &\frac{(l_s - l_i - k + 1)!}{(l_s - l_i - s + 1)!} \cdot \\
 &\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_s - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 &\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - j_i)!} + \\
 &\sum_{k=i^l}^{()} \sum_{(j_s=1)}^{l_i - i^{l+1}} \sum_{j_i=s} \\
 &\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_s = n - j_i + 1)}^{(n_i - j_i - \mathbb{k} + 1)} \\
 &\frac{(n_i - n_s - \mathbb{k} - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i - \mathbb{k} + 1)!} \cdot \\
 &\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 &\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!} \cdot \\
 &\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!} -
 \end{aligned}$$

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$$\begin{aligned}
 & \sum_{k=1}^{i^{l-1} (l_s - k + 1)} \sum_{(j_s=2)} \sum_{j_i=j_s+s-1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_i=n+l_k-j_s)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_{sa}^s-l_k)}^{(\cdot)} \\
 & \frac{(2 \cdot n_{ik} + j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - s - 2 \cdot l_k - 2 \cdot j_{sa}^s)!}{(2 \cdot n_{ik} + 2 \cdot j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - n - 2 \cdot l_k - 2 \cdot j_{sa}^s)!} \cdot \\
 & \frac{1}{(n + j_s - s - j_s)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - j_i)!} \\
 & \sum_{k=i^l}^{(\cdot)} \sum_{(j_s=1)} \sum_{j_i=s} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n_i-j_s-j_{sa}^{ik})}^{(\cdot)} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-l_k)} \\
 & \frac{(2 \cdot n_{ik} + j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - s - 2 \cdot l_k - 2 \cdot j_{sa}^s)!}{(2 \cdot n_{ik} + 2 \cdot j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - n - 2 \cdot l_k - 3 \cdot j_{sa}^s)! \cdot (n - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}
 \end{aligned}$$

$$\begin{aligned}
 & ((D \geq n < n) \wedge l_s \leq D - n + 1 \wedge \\
 & 1 \leq j_i - s + 1 \wedge \\
 & j_s + s - 1 \leq j_i \leq n \wedge \\
 & l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge \\
 & D + s - n < l_i \leq D + l_s + s - n - 1) \vee
 \end{aligned}$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \wedge$$

$$D \geq n < n \wedge l_i - l_s > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^s - k \wedge j_{sa}^s \leq j_i - k - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k, j_{sa}^i\} \quad \mathbb{K}: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}^s\} \wedge$$

$$s > z \quad s = s + k \wedge$$

$$k_z: z = 1 =$$

$$fz S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(j_i-s+1)} \sum_{j_i=l_i+n-D}^{l_s+s-k} \\ \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k} \\ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(l_i)!}{(D + j_i - n - l_i)! \cdot (j_i)!} +$$

$$\sum_{k=1}^{i-1} \sum_{j_s=1}^{(l_s - k + 1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(i - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{i-1} \sum_{j_s=1}^{(l_s - k + 1)} \sum_{j_i=l_i+n-D}^{l_i - i + 1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_s=n-j_i+1)}^{(n_i - j_i - \mathbb{k} + 1)}$$

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$$\frac{(n_i - n_s - \mathbb{k} - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i - \mathbb{k} + 1)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - l_s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{j_i=s+1}^{n-l_i-k}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{j_s=j_s+1}^{(n_i-j_s+1)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{j_s=j_s+1}^{(n_i-j_s+1)}$$

$$\frac{(n_{ik} + j_{sa} + 2 \cdot j_{sa} - n_s - s - 2 \cdot \mathbb{k} - 2 \cdot j_{sa}^s)!}{(n_{ik} + 2 \cdot j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - n - 2 \cdot \mathbb{k} - 3 \cdot j_{sa}^s)!}$$

$$\frac{1}{(n + j_{sa}^s - s - j_s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n + 1 \wedge l_i \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_i + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n + 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1)) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}^i\} \quad s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \dots, j_{sa}^i\} \wedge$$

$$s > 2 \wedge s = \dots + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$fz S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i^{l-1} (l_i + n - D - s)} \sum_{(j_s=2)}^{l_i - k + 1} \sum_{j_i = l_i + n - D}^{n_{is} + j_s - j_i - \mathbb{k}}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_s = n - j_i + 1}^{n_{is} + j_s - j_i - \mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!}$$

$$\begin{aligned}
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{i-1} \sum_{j_s=l_i+1}^{l_s-k+1} \sum_{j_i=j_s+1}^{n-j_s-k+1} \frac{(n_i - j_s + 1)! \cdot (n_{is} + j_s - j_i - k)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \sum_{n_i=n+k}^{n_i+l_i} \sum_{n_s=n+k-j_s+1}^{n_s+l_i-j_s+1} \sum_{j_i=j_s+1}^{n-j_s-k+1} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - k - 1)!}{(j_i - 2)! \cdot (n_{is} + j_s - n_s - j_i - k)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=i}^{()} \sum_{j_s=1}^{l_i-i+1} \sum_{j_i=l_i+n-D}^{l_i-i+1} \\
 & \sum_{n_i=n+k}^n \sum_{n_s=n-j_i+1}^{(n_i-j_i-k+1)} \\
 & \frac{(n_i - n_s - k - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i - k + 1)!} \cdot
 \end{aligned}$$

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$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)} \sum_{j_{s+1}^{s+1}}$$

$$\sum_{n_i=n}^n \sum_{(n_{is}=n+k-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}^{s-1} - j_{sa}^{ik} (n_{is}^{s-1} + j_s + j_{sa}^{ik} - j_i - j_{sa}^{s-k})}$$

$$\frac{(2 \cdot n_{ik} + j_{sa}^{s-1} + 2 \cdot j_{sa}^{ik} - n_s - s - \mathbb{k} - 2 \cdot j_{sa}^s)!}{(2 \cdot n_{ik} + 2 \cdot j_{sa}^{s-1} + j_{sa}^{ik} - n_s - s - \mathbb{k} - 3 \cdot j_{sa}^s)!}$$

$$\frac{1}{(n + j_{sa}^s - s - j_s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D + n + 1 \wedge$$

$$1 \leq j_s \leq j_{s+1} + 1 \wedge$$

$$j_s + 1 \leq j_i$$

$$l_{ik} - j_{sa}^{ik} + j_{sa}^{s-1} = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_s < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s > 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z^{DOSD} S_{j_s, j_i} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(j_i-s+1)} \sum_{j_i=l_i+n-D}^{l_{sa}+s-k-j_{sa}+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s) \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s + j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_s - l_s - s + 1)!}{(j_s + l_s - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(l_{sa}-k-j_{sa}+2)} \sum_{j_i=l_{sa}+s-k-j_{sa}+2}^{l_i-k+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

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$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{()} \sum_{(j_s=1)}^{l_i - i + 1} \sum_{j_i = n - D}^{n - D}$$

$$\sum_{n_i = n + k}^n \sum_{(n_s = n - j_i + 1)}^{(n_s = n - j_i + 1)}$$

$$\frac{(n_i - n_s - j_i - k)!}{(j_i - 2)! \cdot (n_i - n_s - j_i - k + 1)!}$$

$$\frac{(n - j_i - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_i - l_s + 1)! \cdot (j_i - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_i-s+1)}^{()} \sum_{j_i=l_i+n-D}^{l_{sa}+s-k-j_{sa}+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_s=n+k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^{ik})}^{()}$$

$$\frac{(2 \cdot n_{ik} + j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - s - 2 \cdot k - 2 \cdot j_{sa}^s)!}{(2 \cdot n_{ik} + 2 \cdot j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - n - 2 \cdot k - 3 \cdot j_{sa}^s)!}$$

$$\frac{1}{(n + j_{sa}^s - s - j_s)!}$$

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$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s > 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned} zS_{j_s, j_i}^{DOSD} &= \sum_{k=1}^{l_i-1} \sum_{(j_s=2)}^{(l_i+n-D-s)} \sum_{j_i=l_i+n-D}^{l_i-k+1} \\ &\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}} \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!} \\ &\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \\ &\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \end{aligned}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{i-1} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{sa}-k-j_{sa}+2)} \sum_{j_i=j_s+s-1}^{l_i-k+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n=n-j_i+1}^{n_{is}+j_s-1}$$

$$\frac{(n_i - n_{is} - \mathbb{k} + 1)!}{(j_s - 2)! \cdot (n_i - n_s - j_i - \mathbb{k} + 1)!} \cdot$$

$$\frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_i - n_s - j_i - \mathbb{k})!} \cdot$$

$$\frac{(n_s - j_i - n - 1)!}{(n_s - j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_i - j_s - k - 1)!}{(l_i - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s - l_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^i \sum_{(j_s=1)}^{()} \sum_{j_i=l_i+n-D}^{l_i-i+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_s=n-j_i+1)}^{(n_i-j_i-k+1)}$$

$$\frac{(n_i - n_s - \mathbb{k} - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i - \mathbb{k} + 1)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

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$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{sa}-k-j_{sa}+2)} \sum_{j_i=j_s+s-1} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{()} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_{sa}^s-k)}^{()} \frac{(2 \cdot n_{ik} + j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - s - k - 2 \cdot j_{sa}^s)!}{(2 \cdot n_{ik} + 2 \cdot j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - s - k - 2 \cdot j_{sa}^s)!} \cdot \frac{1}{(n + k - s - j_s)!} \cdot \frac{(l_s - k)}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^s + j_{sa}^{ik} = l_s \wedge l_s + j_{sa}^{ik} - j_{sa}^s > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + 1 - n + 1 \wedge$$

$$D \geq l_i < n \wedge I = k > 1 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^i, \dots, k, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k, j_{sa}^i\} \wedge$$

$$s > 2 \wedge s = j_{sa}^i + k \wedge$$

$$I = k \Rightarrow$$

$$fz_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(j_i-s+1)} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{ik}+s-k-j_{sa}^{ik}+1}$$

$$\begin{aligned}
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=2}^{i^{l-1} (l_{ik} - j_{sa}^{ik} + 2)} \sum_{j_i=l_{ik}+s-k-j_{sa}^{ik}+1}^{l_{sa}+s-k-j_{sa}+1} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +
 \end{aligned}$$

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$$\begin{aligned}
 & \sum_{k=1}^{l_i} \sum_{(j_s=1)}^{l_{sa}+s-i^{l-j_{sa}+1}} \sum_{j_i=l_{sa}+n+s-D-j_{sa}} \\
 & \sum_{n_i=n+k}^n \sum_{(n_s=n-j_i)}^{(n_i-j_i-k+1)} \\
 & \frac{(n_i - n_s - k - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i - k + 1)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s - 1)! \cdot (j_i - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{D+l_s+s-n-j_s} \sum_{(j_s=1)}^{l_{ik}+s-k-j_{sa}^{ik}+1} \sum_{j_i=l_{sa}+n+s-D-j_{sa}} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-k)}^{(n_{ik}+j_s+2 \cdot j_{sa}^{ik}-n_s-j_i-s-2 \cdot k-2 \cdot j_{sa}^s)!} \\
 & \frac{(2 \cdot n_{ik} + 2 \cdot j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - n - 2 \cdot k - 3 \cdot j_{sa}^s)!}{(2 \cdot n_{ik} + 2 \cdot j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - n - 2 \cdot k - 3 \cdot j_{sa}^s)!} \cdot \\
 & \frac{1}{(n + j_{sa}^s - s - j_s)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k, j_{sa}^i\} \wedge$$

$$s > 2 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$fz S_{j_s, l_i}^{DOSD} = \sum_{k=1}^{i-1} \sum_{l=2}^{(l_{sa}+n-D-j_{sa}^{ik})} \sum_{j_i=j_s+k-j_{sa}+1}^{(l_{sa}+n-D-j_{sa}^{ik})} \sum_{n_i=n+k}^n \sum_{n_{is}=n+k-j_s+1}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{(n_{is}+j_s-j_i-k)}$$

$$\frac{(n_i - n_{is} - 1)!}{(i - l - 1)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - k - 1)!}{(i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - k)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{i-1} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j_i=j_s+s-1}^{(l_{sa}+s-k-j_{sa}+1)}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{(n_{is}+j_s-j_i-k)}$$

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$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - k - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - k)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - s + 1)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(n - l_i)!}{(n - j_i - l_i)! \cdot (n - j_i)!}$$

$$\sum_{j_s=1}^{l_s} \sum_{j_i=1}^{n-l_s} \sum_{j_a=1}^{n-l_s-j_s} \binom{n-l_s-j_s-j_a+1}{j_s} \binom{n-l_s-j_s-j_a+1}{j_i} \binom{n-l_s-j_s-j_a+1}{j_a}$$

$$\sum_{n_i=n+k}^n \sum_{n_s=n-j_i+1}^{(n_i-j_i-k+1)}$$

$$\frac{(n_i - n_s - k - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i - k + 1)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j_i=j_s+s-1}$$

$$\sum_{n_i=n+k}^n \sum_{n_{is}=n+k-j_s+1}^{(n_i-j_s+1)}$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}} \sum_{()}^{()} (n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-k)$$

$$\frac{(2 \cdot n_{ik} + j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - s - 2 \cdot k - 2 \cdot j_{sa}^s)!}{(2 \cdot n_{ik} + 2 \cdot j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - n - 2 \cdot k - 3 \cdot j_{sa}^s)!}$$

$$\frac{1}{(n + j_{sa}^s - s - j_{sa}^s)}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)}{(D + j_i - n - l_i)! \cdot (n - l_i)!}$$

$$((D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1)) \wedge$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1)) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1)) \wedge$$

$$D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s > 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$fz_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(j_i-s+1)} \sum_{j_i=l_{sa}+n+s-D-j_s}^{l_s+s-k} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(j_i - i - 1)! \cdot (n_{is} + j_s - n_s - \mathbb{k})!}{(j_i - i - 1)! \cdot (n_{is} + j_s - n_s - \mathbb{k})!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(l_s-k+1)} \sum_{j_i=l_{sa}+s-k-j_{sa}+1}^{l_{sa}+s-k-j_{sa}+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

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$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{l_i} \sum_{(j_s=1)}^{l_{sa}+s-k} \sum_{i=l_{sa}+n+k-D-j_{sa}}^{l_{sa}+s-k-l_{jsa}+1} \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_s=n-j_i+1)}^{(n_i-j_s+1)}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(n_i - j_s + 1)!}{(n_i - n_s - j_i - l_s + 1)!}$$

$$\frac{(n_i - j_s + 1)!}{(n_i + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s + 1)! \cdot (j_i - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

$$\sum_{k=1}^{l_s+s-n-l_i} \sum_{(j_s=j_i-s+1)}^{l_s+s-k} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_s+s-k}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_s=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^{ik})} \sum_{(j_s=j_i-s+1)}^{(n_i-j_s+1)}$$

$$\frac{(2 \cdot n_{ik} + j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - s - 2 \cdot l_k - 2 \cdot j_{sa}^s)!}{(2 \cdot n_{ik} + 2 \cdot j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - n - 2 \cdot l_k - 3 \cdot j_{sa}^s)!}$$

$$\frac{1}{(n + j_{sa}^s - s - j_s)!}$$

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$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 1 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - j_{sa}^s \leq j_i - 1 \wedge$$

$$s: \{j_{sa}^i, \mathbb{k}, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s > 2 \wedge s = j_s + \mathbb{k} \wedge$$

$$\mathbb{k} \geq 1 \Rightarrow$$

$$fz S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(l_{sa}+n-D-j_{sa})} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{sa}+s-k-j_{sa}+1}$$

$$\begin{aligned}
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=0}^{i^{l-1}} \sum_{j_i=j_s+1}^{(l_s-k-1)} \sum_{j_i=j_s+1}^{l_{sa}+s-k-j_{sa}+1} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +
 \end{aligned}$$

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$$\begin{aligned}
 & \sum_{k=1}^l \sum_{(j_s=1)}^{()} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{sa}+s-i^{l-j_{sa}+1}} \\
 & \sum_{n_i=n+k}^n \sum_{(n_s=n-j)}^{(n_i-j_i-k+1)} \\
 & \frac{(n_i - n_s - k - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i - k + 1)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s - 1)! \cdot (j_i - s)!} \cdot \\
 & \frac{(l_s - 1)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{D+l_s+s-n} \sum_{(j_s=1)}^{(l_s-n)} \sum_{j_i=j_s+s-1}^{n-D-j_{sa}+1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^{ik})}^{()} \\
 & \frac{(2 \cdot n_{ik} + j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - s - 2 \cdot k - 2 \cdot j_{sa}^s)!}{(2 \cdot n_{ik} + 2 \cdot j_s + 2 \cdot j_{sa}^{ik} - n_s - j_i - n - 2 \cdot k - 3 \cdot j_{sa}^s)!} \cdot \\
 & \frac{1}{(n + j_{sa}^s - s - j_s)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

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$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D \geq n < n \wedge l = k = 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}^i\} \wedge$$

$$s \geq 2 \wedge s = s \Rightarrow$$

$$fz S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik})}^{(j_i-s+1)} \sum_{(l_{ik}+s-k-j_{sa}^{ik})}^{(l_{ik}+s-k-j_{sa}^{ik})} \sum_{(n_i=n-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_s=n-j_i+1)}^{(n_{is}+j_s-j_i)}$$

$$\frac{(n_i - n_{is} - 1)!}{(i - l_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{D-n+1} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik})}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{(j_i=l_{ik}+s-k-j_{sa}^{ik}+2)}^{(l_i-k+1)} \sum_{(n_i=n-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_s=n-j_i+1)}^{(n_{is}+j_s-j_i)}$$

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$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i - 1)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - 1)!}{(j_s + l_i - j_i - 1)! \cdot (j_i - j_s - 1)!} \cdot \frac{(n - l_i)!}{(n - l_i - 1)! \cdot (n - j_i)!} \cdot \sum_{k=0}^{l_s + s - n - j_s + 1} \binom{l_s + s - n - j_s + 1}{k} \sum_{j_i = l_i + n - D}^{j_{sa}^{ik} + 1} \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{\mathbb{k} = n_{is} + j_{sa}^s - j_{sa}^{ik}}^{(n_s = n_{ik} + j_s + j_{sa}^{ik} - j_i - j_{sa}^s - \mathbb{k})} \binom{n_i - j_s + 1}{\mathbb{k}} \cdot \frac{(n_{is} + n_{ik} + j_s + j_{sa}^{ik} - n_s - j_i - s - 2 \cdot \mathbb{k} - j_{sa}^s)!}{(n_{is} + n_{ik} + j_s + j_{sa}^{ik} - n_s - j_i - n - 2 \cdot \mathbb{k} - 2 \cdot j_{sa}^s)!} \cdot \frac{1}{(n + j_{sa}^s - s - j_s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

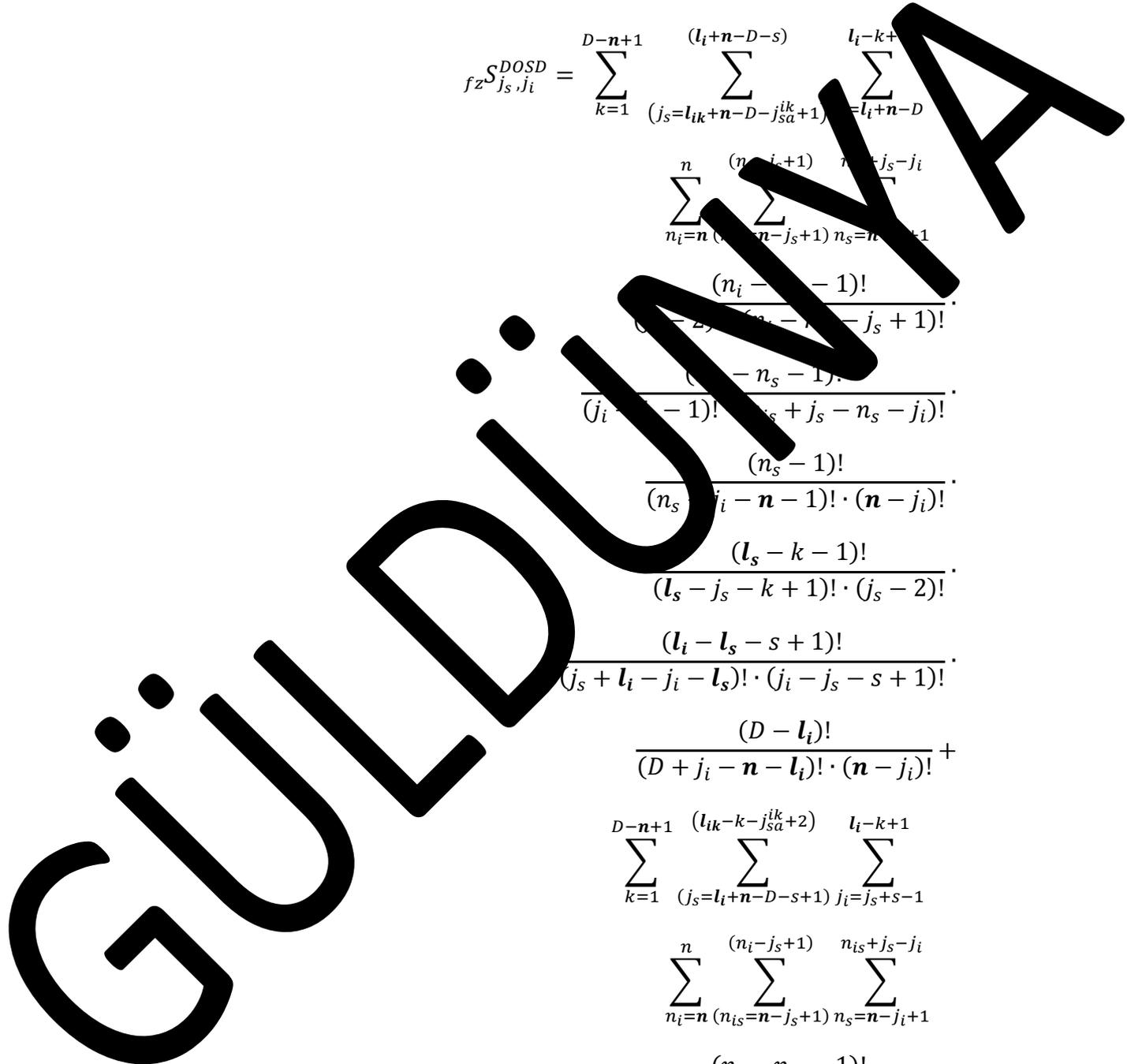
$D \geq n < n \wedge I = \mathbb{k} = 0 \wedge$

$j_{sa}^s \leq j_{sa}^i - 1 \wedge$

$s: \{j_{sa}^s, j_{sa}^i\} \wedge$

$s \geq 2 \wedge s = s \Rightarrow$

$$fz_{j_s, j_i}^{SDOSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_i+n-D-s)} \sum_{l_i-k+1}^{l_i-k+1} \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_i+j_s-j_i} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_s - n - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s - j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{D-n+1} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j_i=j_s+s-1}^{l_i-k+1} \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$



$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s - 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+1, \dots, D-s+1)}^{(l_{ik}-l_{ik}^{ik}+2)} \sum_{j_i=j_s+1}^n \sum_{n_i=n+k}^n \sum_{(n_{is}, \dots, n_{i-s+1})}^{(n_i-j_s+1)} \sum_{(n_{is}+j_{sa}^s-j_{sa}^{ik}, \dots, n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-k)}^{(\cdot)} \frac{(n_{is} + n_{ik} + j_s + j_{sa}^s - n - j_i - s - 2 \cdot k - j_{sa}^s)!}{(n_{is} + n_{ik} + 2 \cdot j_s + j_{sa}^{ik} - n_s - j_i - n - 2 \cdot k - 2 \cdot j_{sa}^s)!} \cdot \frac{1}{(n + j_{sa}^s - s - j_s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s = D - n + 1 \wedge$$

$$2 \leq j_s \leq j_s - s + 1 \wedge$$

$$j_i + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D \geq n < n \wedge I = k = 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}^i\} \wedge$$

$s \geq 2 \wedge s = s \Rightarrow$

$$\begin{aligned}
 f_z S_{j_s, j_i}^{DOSD} &= \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(j_i-s+1)} \sum_{j_i=l_{ik}+n+s-D-j_{sa}^{ik}}^{l_s+s-k} \\
 &\quad \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \\
 &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \\
 &\quad \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \\
 &\quad \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 &\quad \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \\
 &\quad \frac{(l_i - l_s - s + 1)!}{(l_i + l_i - j_i - s)! \cdot (j_i - j_s - s + 1)!} \\
 &\quad \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 &\quad \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)} \sum_{j_i=l_s+s-k+1}^{l_{ik}+s-k-j_{sa}^{ik}+1} \\
 &\quad \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \\
 &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \\
 &\quad \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \\
 &\quad \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 &\quad \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}
 \end{aligned}$$

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$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_i-s+1)}^{(\quad)} \sum_{j_i=l_{ik}+n+s-D-j_{sa}^{ik}}^{l_s+s-k}$$

$$\sum_{n_i=n_{is}+j_{sa}^{ik}}^n \sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_i-j_{sa}^{ik}}^{(n-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_i-j_{sa}^{ik}}^{(\quad)} \sum_{n_{ik}+j_{sa}^{ik}-j_i-j_{sa}^{ik}}^{(\quad)}$$

$$\frac{(n_{is} + n_{ik} + j_s + j_{sa}^{ik} - n_s - j_i - 2 \cdot j_{sa}^{ik})!}{(n_{is} + n_{ik} + 2 \cdot j_s + j_{sa}^{ik} - n_s - j_i - 2 \cdot j_{sa}^{ik})!}$$

$$\frac{1}{(n + j_{sa}^s - s - j_s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D > n < n_{is} > D - l_i + 1 \wedge$$

$$2 \leq i_c \leq j_i - s + 1 \wedge$$

$$j_c + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 \leq l_c \wedge l_{ik} - j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D > n \wedge I = k = 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^i \wedge$$

$$s: \{j_{sa}^i, j_{sa}^s\} \wedge$$

$$s \geq 2 \wedge s = s \Rightarrow$$

$$fzS_{j_s, j_i}^{DOSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_{ik}+n-D-j_{sa}^{ik})} \sum_{j_i=l_{ik}+n+s-D-j_{sa}^{ik}}^{l_{ik}+s-k-j_{sa}^{ik}+1}$$

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$$\begin{aligned}
 & \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{n-n+1} \sum_{j_i=j_s+1}^{(l_s+1)} \sum_{j_i=j_s+s-1}^{l_{ik}+s-k-j_{sa}^{ik}+1} \\
 & \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_s-k+1)} \sum_{j_i=j_s+s-1} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{()} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_{sa}^s-k)}^{()} \frac{(n_{is} + n_{ik} + j_s + j_{sa}^{ik} - n_s - j_i - s - k - j_{sa}^s)!}{(n_{is} + n_{ik} + 2 \cdot j_s + j_{sa}^{ik} - n_s - j_i - n - 2 \cdot k - j_{sa}^s)!} \cdot \frac{1}{(n + j_s - s - j_s)!} \cdot \frac{(l_s - k - j_s + k + 1)! \cdot (j_s - 2)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\begin{aligned} & ((D \geq n < n \wedge l_s > D - n + 1 \wedge \\ & 2 \leq j_s \leq j_i - s + 1 \wedge \\ & j_s + s - 1 \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik}) \vee \\ & (D \geq n < n \wedge l_s > D - n + 1 \wedge \\ & 2 \leq j_s \leq j_i - s + 1 \wedge \\ & j_s + s - 1 \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik}) \vee \\ & (D \geq n < n \wedge l_s > D - n + 1 \wedge \\ & 2 \leq j_s \leq j_i - s + 1 \wedge \\ & j_s + s - 1 \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik})) \wedge \\ & D \geq n < n \wedge I = k = 0 \wedge \end{aligned}$$

$$j_{sa}^s \leq j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}^i\} \wedge$$

$$s \geq 2 \wedge s = s \Rightarrow$$

$$fz_{j_s, j_i}^{DOSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(j_i-s+1)} \sum_{j_i=l_i+n}^{l_s+s-k} \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s + j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(l_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)} \sum_{j_i=l_s+s-k+1}^{l_i-k+1} \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

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$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_i-s+1)}^{()} \sum_{j_i=n-D}^{l_s+s-k} \sum_{n_i=n}^n \sum_{(n_i=n+k-j_s+1)}^{()} \frac{(n_{is} + n_{ik} + j_s + j_{sa}^{ik} - n_s - j_i - s - 2 \cdot k - j_{sa}^s)!}{(n_{is} + n_{ik} + 2 \cdot j_s + j_{sa}^{ik} - n_s - j_i - s - n - 2 \cdot k - 2 \cdot j_{sa}^s)!} \cdot \frac{1}{(n + j_{sa}^s - s - j_s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\begin{aligned} & ((D - n < n \wedge l_s > D - n + 1 \wedge \\ & 2 \leq j_s \leq j_i - s + 1 \wedge \\ & j_s + s - 1 \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik}) \vee \\ & ((D - n < n \wedge l_s > D - n + 1 \wedge \\ & 2 \leq j_s \leq j_i - s + 1 \wedge \\ & j_s + s - 1 \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik}) \vee \end{aligned}$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik}) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} = 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}^i\} \wedge$$

$$s \geq 2 \wedge s = s \Rightarrow$$

$$\begin{aligned}
 & \sum_{k=1}^{D-n+1} \sum_{j_s=l_i+n-D-s+1}^{(l_i+l_s-k-s)} \sum_{j_i=j_s+s-1}^{l_i-k+1} \\
 & \sum_{n_i=n}^n \sum_{n_{is}=n-j_s+1}^{(i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{D-n+1} \sum_{j_s=l_i+n-D-s+1}^{(l_s-k+1)} \sum_{j_i=j_s+s-1}^{l_i-k+1} \\
 & \sum_{n_i=n}^n \sum_{n_{is}=n-j_s+1}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i}
 \end{aligned}$$

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$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i - 1)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - 1)!}{(j_s + l_i - j_i - 1)! \cdot (j_i - j_s - 1)!} \cdot \frac{(n - l_i)!}{(n - j_i - 1)! \cdot (n - j_i)!} \cdot \sum_{k=1}^{l_s + s - n - l_i} \sum_{j_s = l_i + k}^{n - s + 1} \sum_{j_i = j_s + s - 1}^n \sum_{n_i = n + k}^n \sum_{n_{is} = n + k - j_s + 1}^{(n_i - j_s + 1)} \sum_{n_s = n_{ik} + j_s + j_{sa}^{ik} - j_i - j_{sa}^{ik} - k}^{(n_i - j_s + 1)} \frac{(n_{is} + n_{ik} + j_s + j_{sa}^{ik} - n_s - j_i - s - 2 \cdot k - j_{sa}^s)!}{(n_{is} + n_{ik} + 2 \cdot j_s + j_{sa}^{ik} - n_s - j_i - n - 2 \cdot k - 2 \cdot j_{sa}^s)!} \cdot \frac{1}{(n + j_{sa}^s - s - j_s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

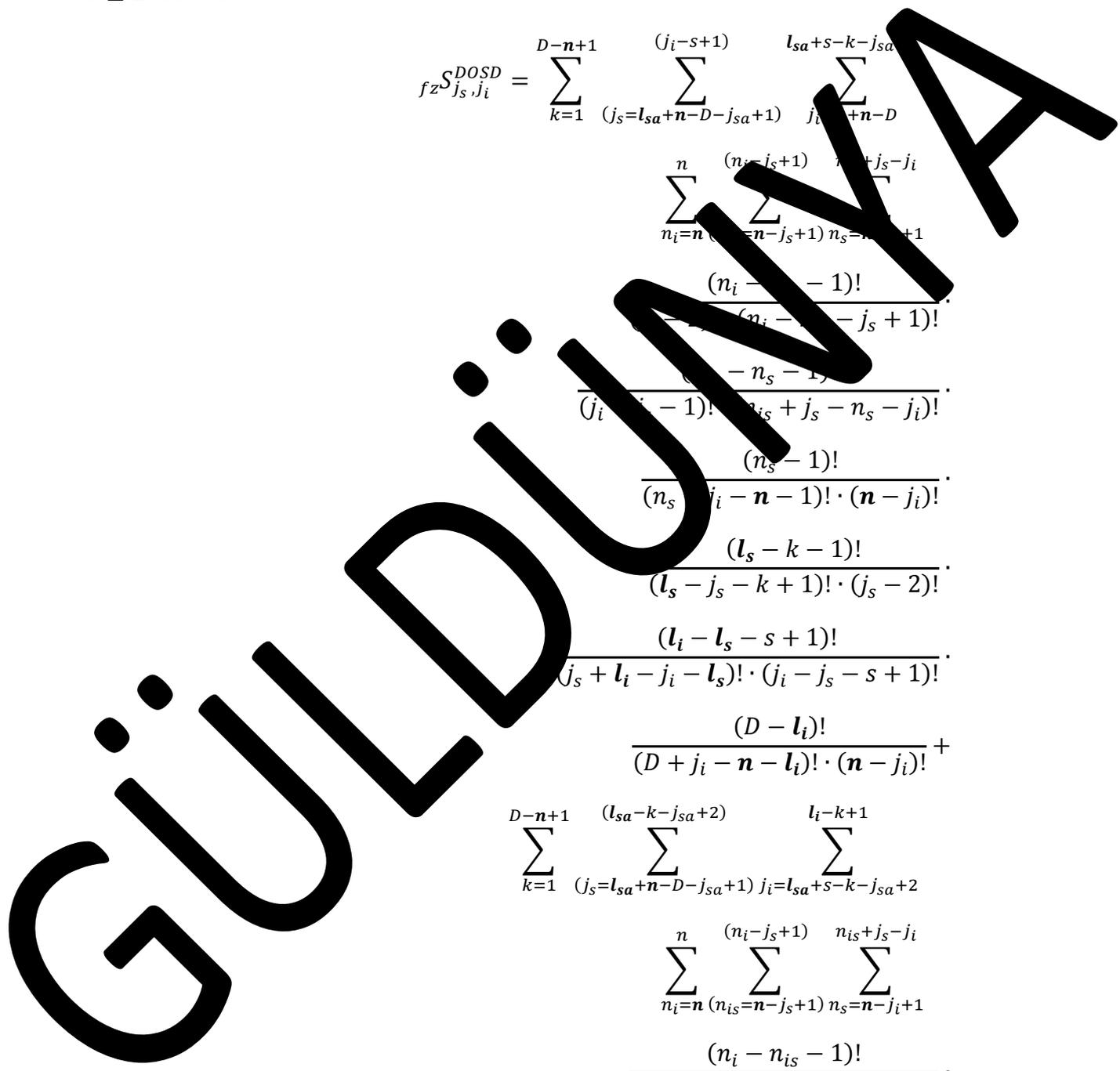
$D \geq n < n \wedge I = \mathbb{k} = 0 \wedge$

$j_{sa}^s \leq j_{sa}^i - 1 \wedge$

$s: \{j_{sa}^s, j_{sa}^i\} \wedge$

$s \geq 2 \wedge s = s \Rightarrow$

$$fzS_{j_s, j_i}^{DOSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(j_i-s+1)} \sum_{j_i=l_{sa}+s-k-j_{sa}}^{l_{sa}+s-k-j_{sa}} \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_i+j_s-j_i} \frac{(n_i - n_{is} - 1)!}{(n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_i - n_s - 1)!}{(n_i - n_s - j_s + 1)!} \cdot \frac{(j_i - n_{is} - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}{(n_s - 1)!} \cdot \frac{(n_s - 1)!}{(n_s - j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_{sa}-k-j_{sa}+2)} \sum_{j_i=l_{sa}+s-k-j_{sa}+2}^{l_i-k+1} \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$



$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s - 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_i-k+1)}^{(l_s+s-j_i+1)} \sum_{j_i=l_i+n-k}^{(n-j_s+1)} \sum_{n_i=n+k}^n \sum_{(n_s=j_s+1)}^{(n_i-j_s+1)} \sum_{(n_i+n_{ik}+2 \cdot j_{sa}^{ik} - n_s - j_i - n - 2 \cdot k - 2 \cdot j_{sa}^s)!}^{(n_{is} + n_{ik} + j_s + j_{sa}^s - n - j_i - s - 2 \cdot k - j_{sa}^s)!} \cdot \frac{1}{(n + j_{sa}^s - s - j_s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n - 1) \wedge l_s > D - n + 1 \wedge$$

$$D \geq n < n - 1 \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_s - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n - 1 \wedge I = k = 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^i - 1 \wedge$$

$s: \{j_{sa}^s, j_{sa}^i\} \wedge$

$s \geq 2 \wedge s = s \Rightarrow$

$$\begin{aligned}
 f_z S_{j_s, j_i}^{DOSD} = & \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_i+n-D-s)} \sum_{j_i=l_i+n-D}^{l_i-k+1} \\
 & \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - 1)!}{(j_i - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{D-n+1} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{sa}-k-j_{sa}+2)} \sum_{j_i=j_s+s-1}^{l_i-k+1} \\
 & \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}
 \end{aligned}$$

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$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{sa}-k-j_{sa}+2)} \sum_{j_i=j_s+s-1}^{(j_s+1)}$$

$$\sum_{n_i=n}^{(n-j_s+1)} \sum_{(n_i=j_s+1)}^{(n_i=j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+1}^{(n_{ik}=n_{is}+1)} \sum_{(n_{ik}=n_{is}+1)}^{(n_{ik}=n_{is}+1)}$$

$$\frac{(n_{is} + n_{ik} + j_s + j_{sa}^{ik} - n_s - s - 2 \cdot j_{sa}^s)!}{(n_{is} + n_{ik} + 2 \cdot j_s + j_{sa}^{ik} - n_s - j_i - 2 \cdot k - 2 \cdot j_{sa}^s)!}$$

$$\frac{1}{(n + j_{sa}^s - s - j_s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n_{is} > D - s + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 \leq l_s \wedge l_{ik} - j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n \wedge I = k = 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^i \wedge$$

$$s \in \{j_{sa}^s, j_{sa}^i\} \wedge$$

$$s \geq 2 \wedge s = s \Rightarrow$$

$$fz_{j_s, j_i}^{DOSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(j_i-s+1)} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{ik}+s-k-j_{sa}^{ik}+1}$$

$$\begin{aligned}
 & \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{l_i+1} \sum_{(j_s-j_{sa}+1)}^{(l_{ik}-k+2)} \sum_{j_i=l_{ik}+s-k-j_{sa}+2}^{l_{sa}+s-k-j_{sa}+1} \\
 & \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -
 \end{aligned}$$

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$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_i-s+1)}^{()} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{ik}+s-k-j_{sa}^{ik}+1} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}-j_{sa}^{ik}}^{()} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_{sa}^{sk})}^{()} \frac{(n_{is} + n_{ik} + j_s + j_{sa}^{ik} - n_s - j_i - s - k - j_{sa}^{sk})!}{(n_{is} + n_{ik} + 2 \cdot j_s + j_{sa}^{ik} - n_s - j_i - s - 2 \cdot k - j_{sa}^{sk})!} \cdot \frac{1}{(n + j_s - s - j_s)!} \cdot \frac{(l_s - k - j_s + k + 1)! \cdot (j_s - 2)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_s - j_{sa}^{ik} + j_s = l_s \wedge l_s + j_{sa}^{ik} - j_{sa} > l_i \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge l_i = 0 \wedge$$

$$j_{sa}^s \leq j_s - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}^i\}$$

$$s > j_s = s \Rightarrow$$

$$f_z^{SDOSD}_{j_s, j_i} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_{sa}+n-D-j_{sa})} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{sa}+s-k-j_{sa}+1} \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D-l_i} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_{ik}-j_{sa}^k+2)} \sum_{j_i=j_s+s-1}^{j_{sa}+1}$$

$$\sum_{n_i=n-j_s+1}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_{ik}-k-j_{sa}^k+2)} \sum_{j_i=j_s+s-1}^{j_{sa}+1}$$

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$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s)}^{()}$$

$$\frac{(n_{is} + n_{ik} + j_s + j_{sa}^{ik} - n_s - j_i - s - 2 \cdot \mathbb{k} - j_{sa}^s)!}{(n_{is} + n_{ik} + 2 \cdot j_s + j_{sa}^{ik} - n_s - j_i - n - 2 \cdot \mathbb{k} - 2 \cdot j_{sa}^s)!}$$

$$\frac{(n - s - j_s)!}{(n - s - \mathbb{k} - 1)!}$$

$$\frac{(n - j_s - n - 1)! \cdot (j_s - 2)!}{(D - n - l_i) \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$(l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa})) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} = 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^l - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}^l\} \wedge$$

$s \geq 2 \wedge s = s \Rightarrow$

$$fz_{j_s, j_i}^{DOSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(j_i-s+1)} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_s+s-k}$$

$$\sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i}^{n_{is}+j_s-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_i - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_s - l_s - s + 1)!}{(l_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)} \sum_{j_i=l_s+s-k+1}^{l_{sa}+s-k-j_{sa}+1}$$

$$\sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

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$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_i-s+1)}^{(\quad)} \sum_{j_i=l_{sa}+n+s-D-j_s}^{l_s+s-k}$$

$$\sum_{n_i=n}^n \binom{j_s+1}{n_i}$$

$$\sum_{n_{ik}=n_{is}+j_s}^{(\quad)} \sum_{n_{ik}+j_s}^{(\quad)} \binom{\quad}{n_{ik}+j_s - j_i - j_{sa}^{ik}}$$

$$\frac{(n_{is} + n_{ik} + j_s + j_{sa}^{ik} - n_s - s - 2 \cdot j_{sa}^s)!}{(n_{is} + n_{ik} + 2 \cdot j_s + j_{sa}^{ik} - n_s - j_i - s - 2 \cdot k - 2 \cdot j_{sa}^s)!}$$

$$\frac{1}{(n + j_{sa}^s - s - j_s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \wedge$$

$$D \geq n < n \wedge I = \mathbb{K} = 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}^i\} \wedge$$

$$s \geq 2 \wedge s = s \Rightarrow$$

$$f_z S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{D-n+1} \sum_{j_s=l_s+n-k}^{(l_{sa}+n-D-j_{sa})-l_{sa}+s-k} \sum_{j_i=l_{sa}+n+s-D}^{l_{sa}+s-k} \frac{\binom{n}{n_i-j_s+1} \binom{n_{is}+j_s-j_i}{n_{is}-j_s+1}}{\binom{j_s-2}{j_s-2}! \cdot \binom{n_{is}-j_s+1}{n_{is}-j_s+1}!} \cdot \frac{\binom{j_s-n_s-1}{j_s-n_s-1}!}{\binom{-j_s-n_s-1}{-j_s-n_s-1}! \cdot \binom{n_{is}+j_s-n_s-j_i}{n_{is}+j_s-n_s-j_i}!} \cdot \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \frac{(l_i-l_s-s+1)!}{(j_s+l_i-j_i-l_s)! \cdot (j_i-j_s-s+1)!} \cdot \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \sum_{k=1}^{D-n+1} \sum_{j_s=l_{sa}+n-D-j_{sa}+1}^{(l_s-k-1)} \sum_{j_i=j_s+s-1}^{l_{sa}+s-k-j_{sa}+1} \frac{\binom{n}{n_i-j_s+1} \binom{n_{is}+j_s-j_i}{n_{is}-j_s+1}}{\binom{j_s-2}{j_s-2}! \cdot \binom{n_{is}-j_s+1}{n_{is}-j_s+1}!} \cdot \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!}$$

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$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 1)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(l_i)!}{(D + j_i - n - l_i)! \cdot (j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{l_{sa}+n_{sa}+j_{sa}+j_{sa}^k = j_s+s-1}^{(l_s-k-1)} \sum_{n_i=n+1}^n \sum_{n_{is}=n+k-j_s+1}^{(n_i-j_s+1)} \sum_{l_{ik}=n_{is}+j_{sa}-j_{sa}^k}^{(n_s=n_{ik}+j_s+j_{sa}^k-j_i-j_{sa}^k)} \frac{(n_{is} + n_{sa} + 2 \cdot j_{sa}^k + j_{sa}^k - n_s - j_i - s - 2 \cdot k - j_{sa}^s)!}{(n_{is} + n_{sa} + 2 \cdot j_{sa}^k + j_{sa}^k - n_s - j_i - n - 2 \cdot k - 2 \cdot j_{sa}^s)!} \cdot \frac{1}{(n + j_{sa}^s - s - j_s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n + l_s \leq D - n + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$l_i \leq D + s - n \wedge$$

$D \geq n < n \wedge I = \mathbb{k} = 0 \wedge$

$j_{sa}^s \leq j_{sa}^i - 1 \wedge$

$s: \{j_{sa}^s, j_{sa}^i\} \wedge$

$s \geq 2 \wedge s = s \Rightarrow$

$$fz S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i^{l-1} (j_i - s + 1)} \sum_{(j_s=2)}^{l_{ik+s-k-j_{sa}^{ik}}} \sum_{j_i=s+1}^{n_i} \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i - j_s + 1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_i - n_s - 1)!}{(j_i - 1)! \cdot (j_s + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s - j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{i^{l-1} (l_{ik-k-j_{sa}^{ik}+2)} } \sum_{(j_s=2)}^{l_i-k+1} \sum_{j_i=l_{ik+s-k-j_{sa}^{ik}+2}}^{l_i-k+1} \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i - j_s + 1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

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$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s - 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{j_s=1}^{()} \sum_{j_i=1}^{l_i+1}$$

$$\sum_{n_i=n}^{(n_i-j_i+1)} \sum_{(n_s-l-j_i+1)}$$

$$\frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$\sum_{k=1}^{l_i-1} \sum_{(j_s=j_i-s+1)}^{()} \sum_{j_i=s+1}^{l_{ik}+s-k-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-l_k)}^{()}$$

$$\frac{(n_{is} + n_{ik} + j_s + j_{sa}^{ik} - n_s - j_i - s - 2 \cdot l_k - j_{sa}^s)!}{(n_{is} + n_{ik} + 2 \cdot j_s + j_{sa}^{ik} - n_s - j_i - n - 2 \cdot l_k - 2 \cdot j_{sa}^s)!}$$

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$$\frac{1}{(n + j_{sa}^s - s - j_s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - \dots)}$$

$$\sum_{k=l}^{()} \sum_{j_i=s}^{()}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{ik}=n, \dots, j_{sa}^{ik})}^{()} \sum_{n_s=n_{ik} + j_{sa}^{ik} - j_i - j_{sa}^s - \dots}$$

$$\frac{(n_i + n_{ik} + j_s \cdot j_{sa}^{ik} - n_s - j_{sa}^s - \dots - 1)!}{(n_i + n_{ik} + 2 \cdot j_s \cdot j_{sa}^{ik} - n_s - j_{sa}^s - \dots - 2 \cdot j_{sa}^s)! \cdot (n - s)!} \cdot \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$D \geq n < n \wedge l_i \leq D - n + 1$

$1 \leq j_s \leq j_i - s + 1 \wedge$

$j_s + s - 1 \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s + j_{sa}^{ik} - s > l_{ik}$

$D > n < n \wedge k = 0$

$j_{sa}^s = j_{sa}^i - 1 \wedge$

$\{j_{sa}^s, j_{sa}^i\} \wedge$

$s \geq 2 \wedge s = s$

$$fz_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j_i=j_s+s-1}^{l_i-k+1} \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!} \cdot$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot$$

$$\frac{(l_i)!}{(D + j_i - n - l_i)! \cdot (j_i)!} +$$

$$\sum_{k=1}^{i-1} \sum_{j_i=s}^{l_i-i+k} \binom{l_i-i+k}{j_i}$$

$$\sum_{n_i=n}^n \sum_{(n_s=n-j_i+1)}^{(n_i-j_i+1)}$$

$$\frac{(n_i - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_i - n_s - j_i + 1)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - j_s - s)!} \cdot$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!} \cdot$$

$$\sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j_i=j_s+s-1}^{l_{ik}-k-j_{sa}^{ik}+2}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-k)}^{(n_{ik}-k-j_{sa}^{ik}+2)}$$

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$$\frac{(n_{is} + n_{ik} + j_s + j_{sa}^{ik} - n_s - j_i - s - 2 \cdot \mathbb{k} - j_{sa}^s)!}{(n_{is} + n_{ik} + 2 \cdot j_s + j_{sa}^{ik} - n_s - j_i - n - 2 \cdot \mathbb{k} - 2 \cdot j_{sa}^s)!}$$

$$\frac{1}{(n + j_{sa}^s - s - j_s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{j_s} \sum_{l=1}^{j_s-k} \sum_{j_i=l+n-D}^{j_i=l+n-1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}+n_{ik}+j_s-j_{sa}^{ik}-n_s-j_i-s-2\cdot\mathbb{k}-j_{sa}^s)=(n_{is}+n_{ik}+2\cdot j_s+j_{sa}^{ik}-n_s-j_i-n-2\cdot\mathbb{k}-2\cdot j_{sa}^s)-\mathbb{k}}$$

$$\frac{(n_i + n_{ik} + j_s + j_{sa}^{ik} - n_s - j_i - s - 2 \cdot \mathbb{k} - j_{sa}^s)!}{(n_i + n_{ik} + 2 \cdot j_s + j_{sa}^{ik} - n_s - j_i - n - 2 \cdot \mathbb{k} - 2 \cdot j_{sa}^s)! \cdot (n - s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$D \geq n < n \wedge l_s \leq D - n + 1$

$1 \leq j \leq j_i - s + 1$

$j_i - s - 1 \leq j \leq n \wedge$

$l_{ik} + j_{sa}^{ik} + 1 = l_s + j_s + j_{sa}^{ik} + l_{ik} \wedge$

$D + s - 1 < l_i \leq D + j_i + s - n - 1 \wedge$

$D \geq n < n \wedge \mathbb{k} = \mathbb{k} \wedge$

$j_{sa}^s = j_{sa}^s + 1 \wedge$

$s: \{j_{sa}^s, j_{sa}^i\}$

$s \geq 2 \wedge s = s \Rightarrow$

$$fz_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i^{l-1} (j_i - s + 1)} \sum_{(j_s=2)}^{l_{ik} + s - k - j_{sa}^{ik} + 1} \sum_{j_i=l_i+n-D}$$

$$\begin{aligned}
 & \sum_{n_i=n}^n \sum_{n_{is}=n-j_s+1}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=2}^{l_i-1} \sum_{j_i=l_{ik}+s-k-j_{sa}^{ik}+2}^{(l_{ik}-j_{sa}^{ik}+2)} \sum_{j_i=l_{ik}+s-k-j_{sa}^{ik}+2}^{l_i-k+1} \\
 & \sum_{n_i=n}^n \sum_{n_{is}=n-j_s+1}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +
 \end{aligned}$$

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$$\sum_{k=1}^{D+l_s+s-l_i} \sum_{j_s=1}^{l_i-l_{i+1}} \sum_{j_i=l_i+n-D}^{l_i-l_{i+1}+1}$$

$$\sum_{n_i=n}^n \sum_{n_s=n-j_i}^{(n_i-j_i+1)}$$

$$\frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n_s - j_i)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s - 1)! \cdot (j_i - s)!}$$

$$\frac{1}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-l_i} \sum_{j_s=j_i-s+1}^{l_i-l_{i+1}} \sum_{j_i=l_i+n-D}^{l_{ik}+s-k-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+k}^n \sum_{n_s=n+k-j_s+1}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{j_{sa}^s-j_{sa}^{ik}} \sum_{n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-k}^{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-k)}$$

$$\frac{(n_{is} + n_{ik} + j_s + j_{sa}^{ik} - n_s - j_i - s - 2 \cdot k - j_{sa}^s)!}{(n_{is} + n_{ik} + 2 \cdot j_s + j_{sa}^{ik} - n_s - j_i - n - 2 \cdot k - 2 \cdot j_{sa}^s)!}$$

$$\frac{1}{(n + j_{sa}^s - s - j_s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_i - s + 1 \wedge$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} = 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}^i\} \wedge$$

$$s \geq 2 \wedge s = s \Rightarrow$$

$$fz_{j_s, j_i}^{DOSD} = \sum_{k=1}^{l_i} \sum_{(j_s=l_i+n-D-s)}^{(l_i+n-D-s)} \sum_{j_i=l_i+n-D}^{(l_i+n-D-s)+1} \frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{i-l-1} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j_i=j_s+s-1}^{l_i-k+1} \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s + 1)!}{(j_s + l_i - j_i - 1)! \cdot (j_i - j_s + 1)!}$$

$$\frac{(n - l_i)!}{(i - n - 1)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{l+1} \sum_{j_s=1}^{n} \sum_{j_i=l_i+n-D}$$

$$\sum_{n_i=n}^n \sum_{n_s=n-j_i+1}^{(n_i-j_i+1)}$$

$$\frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{j_s=l_i+n-D-s+1}^{(l_{ik}-k-j_{s\bar{a}}^{ik}+2)} \sum_{j_i=j_s+s-1}$$

$$\sum_{n_i=n+k}^n \sum_{n_{is}=n+k-j_s+1}^{(n_i-j_s+1)}$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-k)}$$

$$\frac{(n_{is} + n_{ik} + j_s + j_{sa}^{ik} - n_s - j_i - s - 2 \cdot k - j_{sa}^s)!}{(n_{is} + n_{ik} + 2 \cdot j_s + j_{sa}^{ik} - n_s - j_i - n - 2 \cdot k - 2 \cdot j_{sa}^s)!}$$

$$\frac{1}{(n + j_{sa}^s - s - j_s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - l_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n$$

$$D \geq n < n \wedge I = k = 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}^i\} \wedge$$

$$s \geq 2 \wedge s = s - 1$$

$$f_{zD}^{S_{j_s, j_i}^{DOSD}} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(j_i-s+1)} \sum_{j_i=l_{ik}+n+s-D-j_{sa}^{ik}}^{l_s+s-k}$$

$$\sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\begin{aligned}
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{i^{l-1}} \sum_{(j_s=1)}^{(l_s - l_i + s - j_i - j_s + 1)^{ik} + 1} \sum_{j_i = l_i + s - k}^{(n_i - j_s) \quad n_{is} + j_s - j_i} \\
 & \sum_{n_i = n_{is} = n - j_s + 1}^{(n_i - j_s) \quad n_{is} + j_s - j_i} \sum_{n_i - j_i + 1} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_s - n_s - 1)!}{(j_i - 2)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{i^l} \sum_{(j_s=1)}^{l_{ik} + s - i^l - j_{sa}^{ik} + 1} \sum_{j_i = l_{ik} + n + s - D - j_{sa}^{ik}} \\
 & \sum_{n_i = n}^n \sum_{(n_s = n - j_i + 1)}^{(n_i - j_i + 1)} \\
 & \frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!} \cdot
 \end{aligned}$$

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$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_i-s+1)}^{()} \sum_{j_i=l_{ik}+n-D-j_{sa}^{ik}}^{l_s+s-k}$$

$$\sum_{n_i=n}^n \sum_{n_{is}=n+l_k-j_s+1}^{()}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{sa}^{ik}}^{()} \sum_{n_{is}=n+l_k-j_s+1}^{()} \sum_{n_{is}=n+l_k-j_s+1}^{()} (n_{is}+n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^{ik})$$

$$\frac{(n_{is} + n_{ik} + j_s + j_{sa}^{ik} - n_s - j_i - s - 2 \cdot l_k - j_{sa}^s)!}{(n_{is} + n_{ik} + 2 \cdot j_{sa}^{ik} - n_s - j_i - s - n - 2 \cdot l_k - 2 \cdot j_{sa}^s)!}$$

$$\frac{1}{(n + j_{sa}^s - s - j_s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_s + 1 \wedge$$

$$j_s + 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + j_s + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$l_{ik} < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = l_k = 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}^i\} \wedge$$

$s \geq 2 \wedge s = s \Rightarrow$

$$fz S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(l_{ik}+n-D-j_{sa}^{ik})} l_{ik+s-k-j_{sa}^{ik}+1} \sum_{j_i=l_{ik}+n+s-D-j_{sa}^{ik}}^{n} \sum_{n_i=n}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i + l_s - s + 1)!}{(l_i + l_s - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{i-1} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_s-k+1)} l_{ik+s-k-j_{sa}^{ik}+1} \sum_{j_i=j_s+s-1}^{n} \sum_{n_i=n}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

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$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{l_i} \sum_{(j_s=1)}^{l_{ik}+s-i-l-j_{sa}^{ik}+1} \sum_{j_i=l_{ik}+n+s-D-j_{sa}^{ik}+1}^{l_{ik}+s-i-l-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+k}^n \sum_{n_i=n+k}^{n-j_i+1}$$

$$\frac{(n_s - n_s - 1)!}{(n_s - 2)! \cdot (n_s - j_i + 1)!}$$

$$\frac{(n_s - n - 1)!}{(n_s - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+n-l_i} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_s-k+1)} \sum_{j_i=j_s+s-1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_i=n+k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-k)}^{()}$$

$$\frac{(n_{is} + n_{ik} + j_s + j_{sa}^{ik} - n_s - j_i - s - 2 \cdot k - j_{sa}^s)!}{(n_{is} + n_{ik} + 2 \cdot j_s + j_{sa}^{ik} - n_s - j_i - n - 2 \cdot k - 2 \cdot j_{sa}^s)!}$$

$$\frac{1}{(n + j_{sa}^s - s - j_s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

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$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$l_i \leq D + s - n) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} = 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^i - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, j_{sa}^i\} \wedge$$

$$s \geq 2 \wedge \mathbf{s} = s \Rightarrow$$

$$fz_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(j_i-s+1)} \sum_{j_i=s+1}^{l_s+s-k} \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(l_s-k+1)} \sum_{j_i=l_s+s-k+1}^{l_i-k+1} \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\begin{aligned}
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - \dots)!} + \\
 & \sum_{k=1}^{i^{l-1}} \sum_{(j_s=j_i-s+1)}^{(\dots)} \sum_{j_i=s+1}^{l_s+s-k} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
 & \frac{(n_i - \dots)!}{(j_i - \dots)! \cdot (n_i - n_s - \dots)! \cdot (j_i + 1)!} \cdot \\
 & \frac{(\dots - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_i - l_s + 1)! \cdot (j_i - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!} - \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}}^{(\dots)} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^{ik})}^{(\dots)} \\
 & \frac{(n_{is} + n_{ik} + j_s + j_{sa}^{ik} - n_s - j_i - s - 2 \cdot \mathbb{k} - j_{sa}^s)!}{(n_{is} + n_{ik} + 2 \cdot j_s + j_{sa}^{ik} - n_s - j_i - n - 2 \cdot \mathbb{k} - 2 \cdot j_{sa}^s)!} \cdot \\
 & \frac{1}{(n + j_{sa}^s - s - j_s)!} \cdot
 \end{aligned}$$

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$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^n \sum_{(j_s=1)}^{(\cdot)} \sum_{j_i=1}^{(\cdot)} \frac{(n_i + n_{ik} + j_s + j_{sa}^{ik} - n_s - j_i - s - 2 \cdot l_k - j_{sa}^s)!}{(n_i + n_{ik} + 2 \cdot j_s + j_{sa}^{ik} - n_s - j_i - 2 \cdot l_k - 2 \cdot j_{sa}^s)! \cdot (n - s)!} \cdot \frac{(D - s - n - l_i)!}{(n - s)!}$$

$$\begin{aligned} & ((D \geq n < n \wedge l_s \leq D - n + 1 \wedge \\ & 1 \leq j_s \leq j_i - s + 1 \wedge \\ & j_s + s - 1 \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge \\ & l_i \leq D + s - n) \vee \end{aligned}$$

$$\begin{aligned} & ((D \geq n < n \wedge l_s \leq D - n + 1 \wedge \\ & 1 \leq j_s \leq j_i - s + 1 \wedge \\ & j_s + s - 1 \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge \\ & l_i \leq D + s - n) \vee \end{aligned}$$

$$\begin{aligned} & ((D \geq n < n \wedge l_s \leq D - n + 1 \wedge \\ & 1 \leq j_s \leq j_i - s + 1 \wedge \\ & j_s + s - 1 \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge \\ & l_i \leq D + s - n) \vee \end{aligned}$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$(l_i \leq D + s - n) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} = 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}^i\} \wedge$$

$$s \geq 2 \wedge s = s \Rightarrow$$

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$$\begin{aligned}
 & \sum_{j_s, j_i}^{DOS} \sum_{(j_s=2)}^{l_s-k} \sum_{j_i=j_s+s-1}^{l_i-k+1} \\
 & \sum_{n_i}^{n_i} \sum_{(n_{is}=n-j_s+1)}^{(n_i-1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=i}^{()} \sum_{j_s=1}^{l_i-i+1} \sum_{j_i=s}
 \end{aligned}$$

$$\sum_{n_i=\mathbf{n}}^{\mathbf{n}} \sum_{(n_s=\mathbf{n}-j_i+1)}^{(n_i-j_i+1)}$$

$$\frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}$$

$$\frac{(l_i - l_s - s - 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!}$$

$$\frac{(D - l_i)!}{(D + s - l_i - 1)! \cdot (\mathbf{n} - j_i)!}$$

$$\sum_{k=1}^{l-1} \sum_{(j_s=2)}^{(l_s-1)} \sum_{j_s+s-1}^{(n_i-j_s+1)}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}} \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{(n_{is}+j_{sa}^{is}-j_{sa}^{ik} \mid n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^{s-\mathbb{k}})}$$

$$\frac{(n_{is}+j_{sa}^{is}-j_{sa}^{ik}+j_s+j_{sa}^{ik}-n_s-j_i-s-2 \cdot \mathbb{k}-j_{sa}^s)!}{(n_{is}+n_{ik}+j_s+j_{sa}^{ik}-n_s-j_i-\mathbf{n}-2 \cdot \mathbb{k}-2 \cdot j_{sa}^s)!}$$

$$\frac{1}{(\mathbf{n}+j_{sa}^s-s-j_s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$\sum_{k=l}^{(\)} \sum_{(j_s=1)} \sum_{j_i=s}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^{\mathbf{n}} \sum_{(n_{ik}=n_i-j_s-j_{sa}^{ik})}^{(\)} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^{s-\mathbb{k}})}$$

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$$\frac{(n_i + n_{ik} + j_s + j_{sa}^{ik} - n_s - j_i - s - 2 \cdot \mathbb{k} - j_{sa}^s)!}{(n_i + n_{ik} + 2 \cdot j_s + j_{sa}^{ik} - n_s - j_i - n - 2 \cdot \mathbb{k} - 2 \cdot j_{sa}^s)! \cdot (n - s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$((D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_i - s + 1 = l_s \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} = 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}^i\} \wedge$$

$$s \geq 2 \wedge s = s \Rightarrow$$

$$fzS_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(j_i-s+1)} \sum_{j_i=l_i+n-D}^{l_s+s-k}$$

$$\sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(l_s-k+1)} \sum_{j_i=l_s+s-k+1}^{l_i-k+1}$$

$$\sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

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$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{l_i} \sum_{(j_s=1)}^{l_i - i + 1} \sum_{j_i=l_i+n-l_s}^{l_i - i + 1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_i=n+l_k-j_s+1)}^{n - j_i + 1}$$

$$\frac{(n_i - n_s - 1)!}{(i - 2)! \cdot (n_i - n_s - j_i + 1)!} \cdot$$

$$\frac{(n_s - i - n - 1)!}{(n - j_i)!} \cdot$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_i-s+1)}^{l_s+s-k} \sum_{j_i=l_i+n-D}^{l_s+s-k}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_i=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-l_k)}$$

$$\frac{(n_{is} + n_{ik} + j_s + j_{sa}^{ik} - n_s - j_i - s - 2 \cdot l_k - j_{sa}^s)!}{(n_{is} + n_{ik} + 2 \cdot j_s + j_{sa}^{ik} - n_s - j_i - n - 2 \cdot l_k - 2 \cdot j_{sa}^s)!} \cdot$$

$$\frac{1}{(n + j_{sa}^s - s - j_s)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

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$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \wedge$$

$$D \geq n < n \wedge l = k = 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^l - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}^l\} \wedge$$

$$s \geq 2 \wedge s = s \Rightarrow$$

$$\begin{aligned}
 f_{j_s, j_i}^{S_{DOSD}} &= \sum_{k=1}^{i^{l-1}} \sum_{(j_s=2)}^{(l_i+n-D-s)} \sum_{j_i=l_i+n-D}^{l_i-k+1} \\
 &\sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i}^{n_{is}+j_s-j_i} \\
 &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 &\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 &\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 &\frac{(l_s - j_s - k + 1)!}{(l_s - j_s - 2)!} \cdot \\
 &\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 &\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!} + \\
 &\sum_{k=1}^{i^{l-1}} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)} \sum_{j_i=j_s+s-1}^{l_i-k+1} \\
 &\sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \\
 &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 &\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 &\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 &\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 &\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot
 \end{aligned}$$

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$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{l_i} \sum_{j_s=1}^{()} \sum_{j_i=l_i+n-D}^{l_i - i l + 1}$$

$$\sum_{n_i=n}^n \sum_{(n_i=n-j_i+1)}^{(n_i-j_i+1)}$$

$$\frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - j_i + 1)!} \cdot$$

$$\frac{(n_i - 1)!}{(n_i + j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_i - j_s - 1)!}{(l_i - j_s - l_s + 1)! \cdot (j_i - s)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

$$\sum_{k=1}^{l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)} \sum_{j_i=j_s+s-1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_i=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^{lk})}^{()}$$

$$\frac{(n_{is} + n_{ik} + j_s + j_{sa}^{ik} - n_s - j_i - s - 2 \cdot lk - j_{sa}^s)!}{(n_{is} + n_{ik} + 2 \cdot j_s + j_{sa}^{ik} - n_s - j_i - n - 2 \cdot lk - 2 \cdot j_{sa}^s)!} \cdot$$

$$\frac{1}{(n + j_{sa}^s - s - j_s)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} = 0 \wedge$$

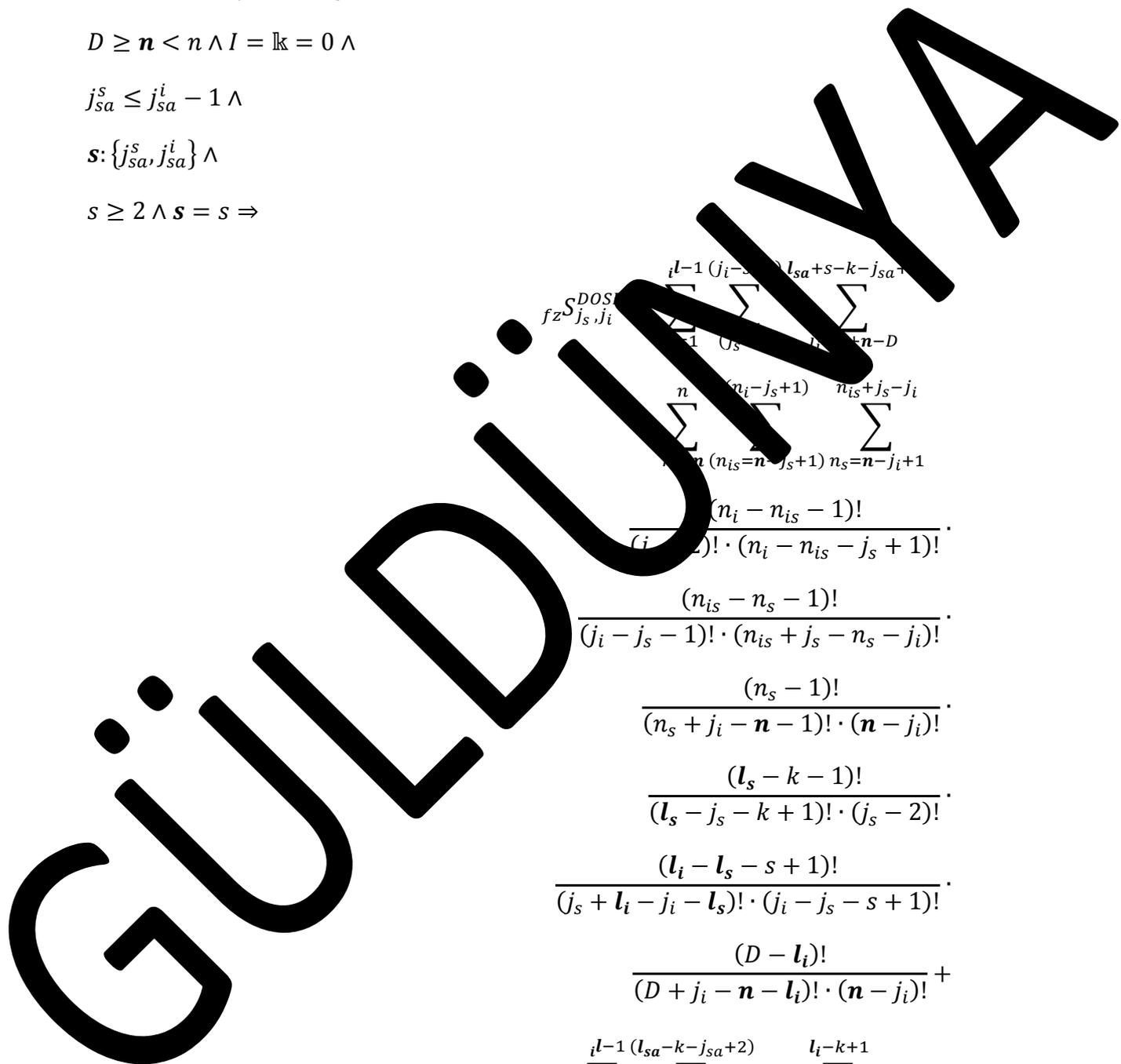
$$j_{sa}^s \leq j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}^i\} \wedge$$

$$s \geq 2 \wedge s = s \Rightarrow$$

$$fz S_{j_s j_i}^{DOS} \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(j_i-s+1)} \sum_{j_i=l_{sa}+s-k-j_{sa}+2}^{l_i-k+1} \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \frac{(n_i - n_{is} - 1)!}{(i - l - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(l_{sa}-k-j_{sa}+2)} \sum_{j_i=l_{sa}+s-k-j_{sa}+2}^{l_i-k+1} \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i}$$



$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - s + 1)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(n - l_i)!}{(n - l_i - s + 1)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{l_s} \sum_{j_s=1}^{(n-l_i-k)} \sum_{j_i=l_i+n-D}^{l_i+k}$$

$$\sum_{n_i=n}^n \sum_{n_s=n-j_i+1}^{(n_i-j_i+1)}$$

$$\frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_i-s+1)}^{(n-l_i-k)} \sum_{j_i=l_i+n-D}^{l_{sa}+s-k-j_{sa}+1}$$

$$\sum_{n_i=n+k}^n \sum_{n_{is}=n+k-j_s+1}^{(n_i-j_s+1)}$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^{js}-j_{sa}^{ik}} \sum_{\binom{()}{n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-\mathbb{k}}} \frac{(n_{is} + n_{ik} + j_s + j_{sa}^{ik} - n_s - j_i - s - 2 \cdot \mathbb{k} - j_{sa}^s)!}{(n_{is} + n_{ik} + 2 \cdot j_s + j_{sa}^{ik} - n_s - j_i - n - 2 \cdot \mathbb{k} - 2 \cdot j_{sa}^s)!} \cdot \frac{1}{(n + j_{sa}^s - s - j_{sa}^s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_i - s + 1 \wedge$

$j_s + s - 1 \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} - j_{sa}^{ik} + j_{sa} - s > l_{sa} \wedge$

$D + s - n < l_i \leq D + l_s + s - n$

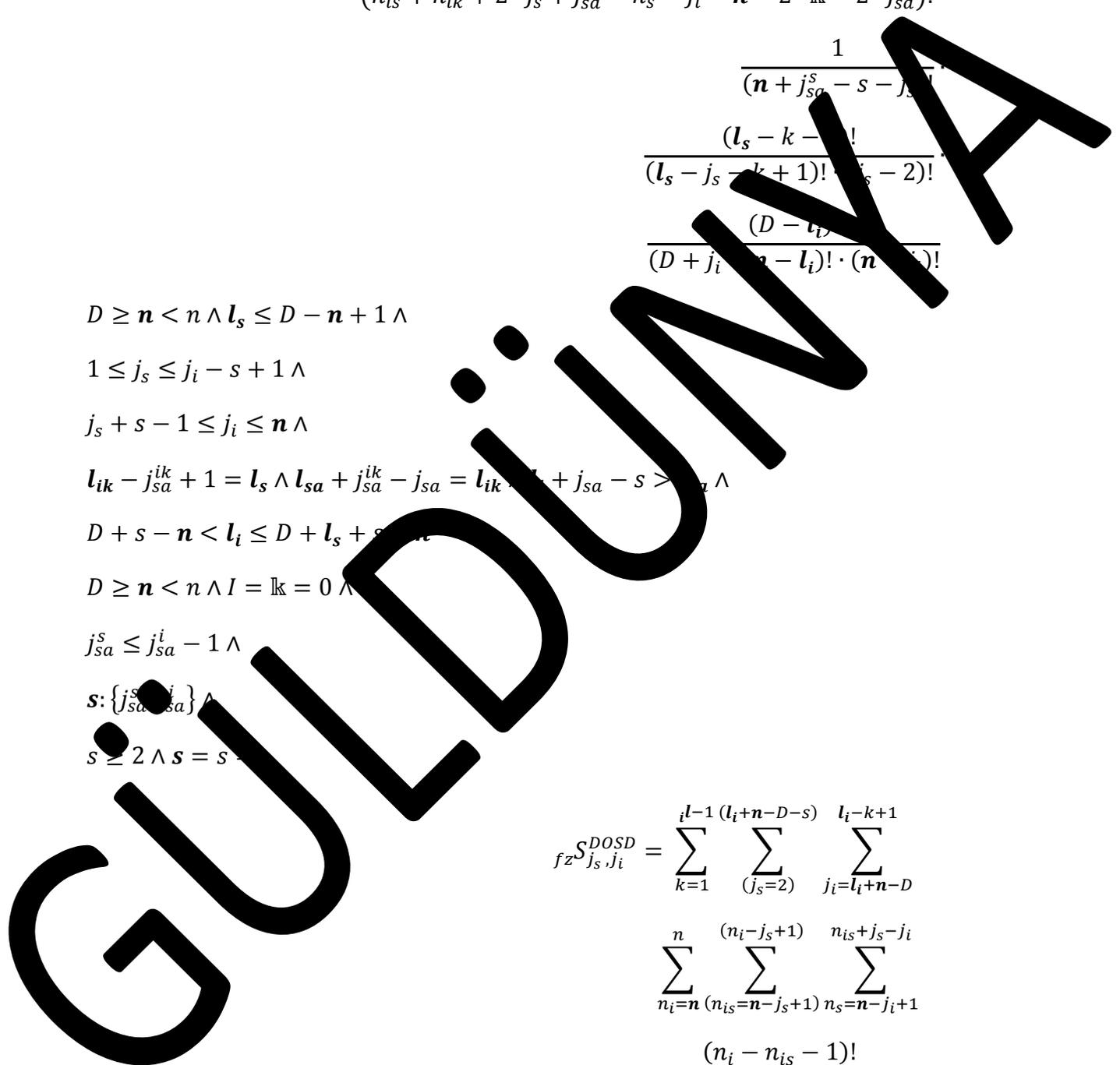
$D \geq n < n \wedge I = \mathbb{k} = 0 \wedge$

$j_{sa}^s \leq j_{sa}^i - 1 \wedge$

$s: \{j_{sa}^s, j_{sa}^i\} \wedge$

$s \geq 2 \wedge s = s$

$$fz S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(l_i+n-D-s)} \sum_{j_i=l_i+n-D}^{l_i-k+1} \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$



$$\begin{aligned}
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \\
 & \sum_{k=1}^{i-1} \sum_{(j_s=l_i+k-1) \cap (j_s=2-s+1)}^{(l_{sa}-k-1) \cap (l_s-k+1)} \sum_{(j_i=j_s+k)}^{(l_i-k+1)} \\
 & \sum_{n_i=n}^{(n_i-j_s)} \sum_{(n_{is}=n-j_s+1)}^{(n_{is}+j_s-j_i)} \sum_{(j_i-j_s+1)}^{(j_i-j_s)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_s - n_s - 1)!}{(j_i - 2)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{i-1} \sum_{(j_s=1)}^{()} \sum_{j_i=l_i+n-D}^{l_i-i+1} \\
 & \sum_{n_i=n}^n \sum_{(n_s=n-j_i+1)}^{(n_i-j_i+1)} \\
 & \frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!}
 \end{aligned}$$

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$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{sa}-k-j_{sa}+2)} \sum_{j_{sa}+s-1}$$

$$\sum_{n_i=n}^n \sum_{(n_{is}=n+k-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{sa}^{ik}} \sum_{(n_{is}+j_s+j_{sa}^{ik}-j_i-j_{sa}^{ik})}$$

$$\frac{(n_{is} + n_{ik} + j_s + j_{sa}^{ik} - n_s - j_i - s - 2 \cdot k - j_{sa}^s)!}{(n_{is} + n_{ik} + 2 \cdot j_s + j_{sa}^{ik} - n_s - j_i - s - n - 2 \cdot k - 2 \cdot j_{sa}^s)!}$$

$$\frac{1}{(n + j_{sa}^s - s - j_s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D + n + 1 \wedge$$

$$1 \leq j_s \leq j_{sa} + s + 1 \wedge$$

$$j_s + 1 \leq j_i =$$

$$l_{ik} - j_{sa}^{ik} + j_s = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$l_s < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge I = k = 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}^i\} \wedge$$

$$s \geq 2 \wedge s = s \Rightarrow$$

$$fz_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(j_i-s+1)} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{ik}+s-k-j_{sa}^{ik}+1} \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j_i=l_{ik}+s-k-j_{sa}^{ik}+2}^{l_{sa}+s-k-j_{sa}+1} \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

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$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{l_i} \sum_{(j_s=1)}^{l_{sa}+s-i-l-j_{sa}+1} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_i=n+k-j_i+1)}^{(n_i-j_i+1)}$$

$$\frac{(n_s - n_s - 1)!}{(i - 2)! \cdot (n_s - j_i + 1)!} \cdot$$

$$\frac{(n_s - n - 1)!}{(n - j_i)!} \cdot$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

$$\sum_{k=1}^{D+l_s+n-l_i} \sum_{(j_s=j_i-s+1)}^{l_{ik}+s-k-j_{sa}^{ik}+1} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_i=n+k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-k)}$$

$$\frac{(n_{is} + n_{ik} + j_s + j_{sa}^{ik} - n_s - j_i - s - 2 \cdot k - j_{sa}^s)!}{(n_{is} + n_{ik} + 2 \cdot j_s + j_{sa}^{ik} - n_s - j_i - n - 2 \cdot k - 2 \cdot j_{sa}^s)!} \cdot$$

$$\frac{1}{(n + j_{sa}^s - s - j_s)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

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$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge I = \mathbb{K} = 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}^i\} \wedge$$

$$s \geq 2 \wedge s = s \Rightarrow$$

$$f_{z^j}^{QSD} = \sum_{k=1}^{i-l_s} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{+n-D-j_{sa}} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{sa}+s-k-j_{sa}+1} \sum_{n_i=n}^{(n_i-j_s+1)} \sum_{(n_{is}=n-j_s+1)}^{n_{is}+j_s-j_i} \sum_{n_s=n-j_i+1}^{(n_s-1)!}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

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$$\begin{aligned}
 & \sum_{k=1}^{i^{l-1}} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_{ik-k-j_{sa}^k}+2)} \sum_{j_i=j_s+1}^{l_{sa+s-k-j_{sa}+1}} \\
 & \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i}^{n_{is}+j_s-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l_i - k + 1)!}{(l_s - l_i - s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_s - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=i^l}^{()} \sum_{(j_s=1)}^{l_{sa+s-i^l-j_{sa}+1}} \sum_{j_i=l_{sa}+n+s-D-j_{sa}} \\
 & \sum_{n_i=n}^n \sum_{(n_s=n-j_i+1)}^{(n_i-j_i+1)} \\
 & \frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -
 \end{aligned}$$

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$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j_i=j_s+s-1} \sum_{n_i=n+lk}^n \sum_{(n_{is}=n+lk-j_s)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_{sa}^s-l_k)} \frac{(n_{is} + n_{ik} + j_s + j_{sa}^{ik} - n_s - j_i - s - l_k - l_{sa}^s)!}{(n_{is} + n_{ik} + 2 \cdot j_s + j_{sa}^{ik} - n_s - j_i - s - l_k - l_{sa}^s)!} \cdot \frac{1}{(n + j_s - s - j_s)!} \cdot \frac{(l_s - k - l_{sa}^s)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} = 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}^i\} \wedge$$

$$s \geq 2 \wedge s = s \Rightarrow$$

$$fz_{j_s, j_i}^{SDOSD} = \sum_{k=1}^{i^{l-1}(j_i-s+1)} \sum_{j_s=2}^{l_s+s-k-j_{sa}+1} \sum_{j_i=l_{sa}+n+s-k+1}^{n} \sum_{n_{is}=n-j_s+1}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(l_s - n_s - 1)!}{(l_s - j_s - k + 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{i^{l-1}(l_s-k+1)} \sum_{j_s=2}^{l_{sa}+s-k-j_{sa}+1} \sum_{j_i=l_{sa}+s-k+1}^{n} \sum_{n_{is}=n-j_s+1}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

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$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!} \cdot$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot$$

$$\frac{(l_i)!}{(D + j_i - n - l_i)! \cdot (j_i)!} +$$

$$\sum_{j_s=j_i-s}^{j_i+s} \binom{n_{is}+s-l-j_{sa}+1}{j_s} \sum_{j_i=j_s}^{n_{is}+s-l-j_{sa}+1} \binom{n_{is}+s-l-j_{sa}+1}{j_i} \cdot$$

$$\sum_{n_i=n}^n \sum_{n_s=n-j_i+1}^{(n_i-j_i+1)}$$

$$\frac{(n_i - n_s - 1)!}{(n_i - 2)! \cdot (n_i - n_s - j_i + 1)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \binom{D+l_s+s-n-l_i}{j_s=j_i-s+1} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_s+s-k}$$

$$\sum_{n_i=n+k}^n \sum_{n_s=n+k-j_s+1}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \binom{D+l_s+s-n-l_i}{j_s=j_i-s+1} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_s+s-k}$$

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$$\frac{(n_{is} + n_{ik} + j_s + j_{sa}^{ik} - n_s - j_i - s - 2 \cdot k - j_{sa}^s)!}{(n_{is} + n_{ik} + 2 \cdot j_s + j_{sa}^{ik} - n_s - j_i - n - 2 \cdot k - 2 \cdot j_{sa}^s)!}$$

$$\frac{1}{(n + j_{sa}^s - s - j_s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!}$$

$$\frac{(D - k)!}{(D + j_i - n - l_i) \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n) \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \wedge$$

$$(D \geq n < n) \wedge l = k = 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^l - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}^l\} \wedge$$

$$s \geq 2 \wedge s = s \Rightarrow$$

$$\begin{aligned}
 f_{zS}^{DOSD}_{j_s, j_i} &= \sum_{k=1}^{i^{l-1} (l_{sa}+n-D-j_{sa})} \sum_{(j_s=2)}^{l_{sa}+s-k-j_{sa}+1} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{sa}+s-k-j_{sa}+1} \\
 &\quad \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i}^{n_{is}+j_s-j_i} \\
 &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 &\quad \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 &\quad \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 &\quad \frac{(l_s - j_s - k + 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 &\quad \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 &\quad \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!} + \\
 &\quad \sum_{k=1}^{i^{l-1} (l_s-k-1)} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{l_{sa}+s-k-j_{sa}+1} \sum_{j_i=j_s+s-1}^{l_{sa}+s-k-j_{sa}+1} \\
 &\quad \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \\
 &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 &\quad \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 &\quad \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 &\quad \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 &\quad \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot
 \end{aligned}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{l_i} \sum_{(j_s=1)}^{()} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{sa}+s-i-l-j_{sa}+1}$$

$$\sum_{n_i=n}^n \sum_{(n_i=n-j_i+1)}^{(n_i-j_i+1)}$$

$$\frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s + 1)!} \cdot$$

$$\frac{(n_i - 1)!}{(n_i + j_i - n_s - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_i - j_s - 1)!}{(l_i - j_s + 1)! \cdot (j_i - s)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

$$\sum_{k=1}^{D+l_i-s-n-l_i} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{s-k-1} \sum_{j_i=j_s+s-1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_i=n+k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{()} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^{ik})}^{()}$$

$$\frac{(n_{is} + n_{ik} + j_s + j_{sa}^{ik} - n_s - j_i - s - 2 \cdot k - j_{sa}^s)!}{(n_{is} + n_{ik} + 2 \cdot j_s + j_{sa}^{ik} - n_s - j_i - n - 2 \cdot k - 2 \cdot j_{sa}^s)!} \cdot$$

$$\frac{1}{(n + j_{sa}^s - s - j_s)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa}^s = j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, k, j_{sa}^i\} \wedge$$

$$s = 2 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$f_z^{DOSD} S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik})}^{(j_i-s+1)} \sum_{(l_{ik}+s-k-j_{sa}^{ik})}^{(l_{ik}+s-k-j_{sa}^{ik})} \sum_{(n_i+n+k)}^{(n_i+n+k)} \sum_{(n_{is}+j_s-j_i-k)}^{(n_{is}+j_s-j_i-k)} \sum_{(n_s=n-j_i+1)}^{(n_s=n-j_i+1)}$$

$$\frac{(n_i - n_{is} - 1)!}{(i - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{D-n+1} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik})}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{(j_i=l_{ik}+s-k-j_{sa}^{ik}+2)}^{(l_i-k+1)} \sum_{(n_i=n+k)}^{(n_i-j_s+1)} \sum_{(n_{is}=n+k-j_s+1)}^{(n_{is}+j_s-j_i-k)} \sum_{(n_s=n-j_i+1)}^{(n_s=n-j_i+1)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i - 1)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s + 1)!}{(j_s + l_i - j_i - 1)! \cdot (j_i - j_s + 1)!} \cdot \frac{(n - l_i)!}{(n - l_i - 1)! \cdot (n - j_i)!} \cdot \sum_{k=1}^{l_s + s - n + 1} \sum_{(j_s = j_i - k + 1)} \sum_{j_i = l_i + n - D}^{j_{sa}^{ik} + 1} \sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s + 1)}^{(n_i - j_s + 1)} \sum_{k = n_{is} + j_{sa}^s - j_{sa}^{ik}}^{(n_s = n_{ik} + j_s + j_{sa}^{ik} - j_i - j_{sa}^s - k)} \frac{(n_{is} + n_{ik} + j_s + j_{sa}^{ik} - n_s - j_i - s - 2 \cdot k - j_{sa}^s)!}{(n_{is} + n_{ik} + j_s + j_{sa}^{ik} - n_s - j_i - n - 2 \cdot k - 2 \cdot j_{sa}^s)!} \cdot \frac{1}{(n + j_{sa}^s - s - j_s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

- $D \geq n < n \wedge l_s > D - n + 1 \wedge$
- $2 \leq j_s \leq j_i - s + 1 \wedge$
- $j_s + s - 1 \leq j_i \leq n \wedge$
- $l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$

$$D \geq n < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa}^s = j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s = 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z^{SDOSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{ik}+n-j_s+1)}^{(l_i+n-D-s)} \sum_{j_i=l_{ik}+1}^{l_i-k+1} \sum_{n_i=n-j_i-\mathbb{k}}^{n_i=j_s+1} \sum_{n_s=n-j_i+1}^{n_s=n+\mathbb{k}-j_s+1} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} + j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{D-n+1} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j_i=j_s+s-1}^{l_i-k+1} \sum_{n_i=n+\mathbb{k}}^{n_i=n+\mathbb{k}-j_s+1} \sum_{n_s=n-j_i+1}^{n_s=n+j_s-j_i-\mathbb{k}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

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$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s - 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+1, \dots, D-s+1)}^{(l_{ik}-l_s+1, \dots, l_s+1)} \sum_{j_i=j_s+1}^{n} \sum_{n_i=n+k}^{n} \sum_{(n_{is}=n-k, \dots, n-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{is}+n_{ik}, \dots, j_s+j_{sa})}^{(n_{is}+n_{ik}, \dots, j_s+j_{sa})} \sum_{(n_{is}+n_{ik}, \dots, j_s+j_{sa})}^{(n_{is}+n_{ik}, \dots, j_s+j_{sa})} \sum_{(n_{is}+n_{ik}, \dots, j_s+j_{sa})}^{(n_{is}+n_{ik}, \dots, j_s+j_{sa})} \frac{(n_{is} + n_{ik} + j_s + j_{sa} - n - j_i - s - 2 \cdot \mathbb{k} - j_{sa}^s)!}{(n_{is} + n_{ik} + 2 \cdot j_s + j_{sa}^{ik} - n_s - j_i - n - 2 \cdot \mathbb{k} - 2 \cdot j_{sa}^s)!} \cdot \frac{1}{(n + j_{sa}^s - s - j_s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s = D - n + 1 \wedge 2 \leq j_s \leq j_s - s + 1 \wedge j_i + s - 1 \leq j_i \leq n \wedge l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge D \geq n < n \wedge I = \mathbb{k} \geq 0 \wedge j_{sa}^s = j_{sa}^i - 1 \wedge \mathbf{s}: \{j_{sa}^s, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s = 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$fz S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(j_i-s+1)} \sum_{j_i=l_{ik}+n+s-D-j_s^{ik}}^{l_s+s-k}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_s - l_s - s + 1)!}{(j_s + j_i - l_s - 1)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)} \sum_{j_i=l_s+s-k+1}^{l_{ik}+s-k-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

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$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_i-s+1)}^{(\)} \sum_{j_i=l_{ik}+n+s-D-j_{sa}^{i,k}}$$

$$\sum_{n_i=n_{i_1}+j_{sa}^{i_1}}^{n} \sum_{n_{i_2}=n_{i_1}+j_{sa}^{i_2}}^{(j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{i_1}+\dots+j_{sa}^{i_k}}^{(\)} \sum_{n_{ik}+j_{sa}^{i_k}-j_i-j_{sa}^{i_k}}^{(\)}$$

$$\frac{(n_{is} + n_{ik} + j_s + j_{sa}^{i_1} + \dots + j_{sa}^{i_k} - n_s - j_i - s - 2 \cdot j_{sa}^{i_1} - \dots - j_{sa}^{i_k})!}{(n_{is} + n_{ik} + 2 \cdot j_s + j_{sa}^{i_1} + \dots + j_{sa}^{i_k} - n_s - j_i - s - 2 \cdot \mathbb{k} - 2 \cdot j_{sa}^{i_1} - \dots - j_{sa}^{i_k})!}$$

$$\frac{1}{(n + j_{sa}^s - s - j_s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D > n < n \wedge D > D - l_i + 1 \wedge$$

$$2 \leq i_c \leq j_i - s + 1 \wedge$$

$$j_c + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{i_k} + 1 \leq l_c \wedge l_{ik} - j_{sa}^{i_k} - s = l_{ik} \wedge$$

$$D > n < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa}^s = j_{sa}^i \wedge$$

$$s: \{j_{sa}^i, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s = 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned}
 f_{zS}^{DOSD}_{j_s, j_i} &= \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_{ik}+n-D-j_{s\bar{a}}^{ik})} \sum_{j_i=l_{ik}+n+s-D-j_{s\bar{a}}^{ik}}^{l_{ik}+s-k-j_{s\bar{a}}^{ik}+1} \\
 &\quad \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i}^{n_{is}+j_s-j_i-k} \\
 &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 &\quad \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 &\quad \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 &\quad \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 &\quad \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 &\quad \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!} + \\
 &\quad \sum_{k=1}^{n+1} \sum_{(j_s=l_{ik}+n-D-j_{s\bar{a}}^{ik}+1)}^{(l_s-k+1)} \sum_{j_i=j_s+s-1}^{l_{ik}+s-k-j_{s\bar{a}}^{ik}+1} \\
 &\quad \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k} \\
 &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 &\quad \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 &\quad \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 &\quad \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 &\quad \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot
 \end{aligned}$$

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$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_s-k+1)} \sum_{j_i=j_s+s-1} \sum_{n_i=n+k}^n \sum_{(n_i-k-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik})}^{(n_{ik}+j_s+j_{sa}^{ik}-j_i-k)} \frac{(n_{is} + n_{ik} + j_s + j_{sa}^{ik} - n - j_i - s - 2 \cdot k - j_{sa}^s)!}{(n_{is} + n_{ik} + 2 \cdot j_s + j_{sa}^{ik} - n - j_i - s - 2 \cdot k - 2 \cdot j_{sa}^s)!} \cdot \frac{(n + j_{sa}^s - s - j_s)!}{(l_s - k - 1)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\begin{aligned} & ((D \geq n < n \wedge l_s > D - n + 1 \wedge \\ & 2 \leq j_s \leq j_i - s + 1 \wedge \\ & j_s + s - 1 \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik}) \vee \\ & ((D \geq n < n \wedge l_s > D - n + 1 \wedge \\ & 2 \leq j_s \leq j_i - s + 1 \wedge \\ & j_s + s - 1 \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik}) \vee \\ & ((D \geq n < n \wedge l_s > D - n + 1 \wedge \\ & 2 \leq j_s \leq j_i - s + 1 \wedge \\ & j_s + s - 1 \leq j_i \leq n \wedge \end{aligned}$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik}) \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa}^s = j_{sa}^l - 1 \wedge$$

$$s: \{j_{sa}^s, k, j_{sa}^l\} \wedge$$

$$s = 2 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$fz S_{j_s j_i}^{DOSD} = \sum_{k=1}^{D-n+1} \sum_{j_s=l_s+n-D}^{(j_s+s+1)} \sum_{j_i=l_i+n-D}^{s-k} \frac{(n_i - j_s + 1) \dots (n_{is} + j_s - j_i - k)}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)! \dots (j_s - n_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{D-n+1} \sum_{j_s=l_s+n-D}^{(l_s-k+1)} \sum_{j_i=l_s+s-k+1}^{l_i-k+1} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

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$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{n_i=n+1}^{D+l_s+s-n-l_i} \sum_{n_{is}=n+k-j_s+1}^{l_s+s-n} \sum_{n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^{ik}}^{l_s+s-n} \sum_{j_{sa}^{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}}^{(n_{is}+j_s+1)} \frac{(n_{is} + n_{ik} + j_{sa}^{ik} - n_s - j_i - s - 2 \cdot k - j_{sa}^s)!}{(n_{is} + n_{ik} + 2 \cdot k + j_{sa}^{ik} - n_s - j_i - n - 2 \cdot k - 2 \cdot j_{sa}^s)!} \cdot \frac{1}{(n + j_{sa}^s - s - j_s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n) \wedge l_s > D - n + 1 \wedge j_s + s - 1 \leq j_i \leq n \wedge l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik}) \vee (D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik})) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa}^s = j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s = 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$fz S_{j_s}^{SD} = \sum_{k=1}^{D-n} \sum_{j_s=l_s+n-D}^{(l_i+n-D-s)} \sum_{j_i=l_i+n-D}^{l_i-k+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

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$$\sum_{k=1}^{D-n+1} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)} \sum_{j_i=j_s+s-1}^{l_i-k+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - j_s - k + 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - l_s)! \cdot (l_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D - l_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)} \sum_{j_i=j_s+s-1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^{ik})}^{()}$$

$$\frac{(n_{is} + n_{ik} + j_s + j_{sa}^{ik} - n_s - j_i - s - 2 \cdot k - j_{sa}^s)!}{(n_{is} + n_{ik} + 2 \cdot j_s + j_{sa}^{ik} - n_s - j_i - n - 2 \cdot k - 2 \cdot j_{sa}^s)!}$$

$$\frac{1}{(n + j_{sa}^s - s - j_s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa}^s = j_{sa}^l - 1 \wedge$$

$$s: \{j_{sa}^s, k, j_{sa}^l\} \wedge$$

$$s = 2 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$fz S_{j_s, j_i}^{DG} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{sa}+k, j_i=l_{sa}+k-j_{sa}+1)}^{(j_i-s+1, l_{sa}+s-k-j_{sa}+1)} \sum_{j_i=l_i+n-D}^{l_{sa}+s-k-j_{sa}+1} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_{sa}-k-j_{sa}+2)} \sum_{j_i=l_{sa}+s-k-j_{sa}+2}^{l_i-k+1}$$

$$\begin{aligned}
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_s - s - 1)!}{(j_s + l_i - l_s - s + 1)! \cdot (i_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{s=1}^{D+l_s+s-n-l_i} \binom{()}{s=j_i-s+1} \sum_{j_i=l_i+n-D}^{l_{sa}+s-k-j_{sa}+1} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \binom{()}{n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-\mathbb{k}} \\
 & \frac{(n_{is} + n_{ik} + j_s + j_{sa}^{ik} - n_s - j_i - s - 2 \cdot \mathbb{k} - j_{sa}^s)!}{(n_{is} + n_{ik} + 2 \cdot j_s + j_{sa}^{ik} - n_s - j_i - n - 2 \cdot \mathbb{k} - 2 \cdot j_{sa}^s)!} \cdot \\
 & \frac{1}{(n + j_{sa}^s - s - j_s)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

$((D \geq n < n \wedge l_s > D - n + 1 \wedge$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa}^s = j_{sa}^l - 1 \wedge$$

$$s: \{j_{sa}^s, k, j_{sa}^l\} \wedge$$

$$s = 2 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$\begin{aligned}
 & \sum_{j_s, j_i}^{D-n+1, D} \sum_{(j_s=l_{sa}, \dots, D-j_{sa}+1)}^{D-s} \sum_{j_i=l_i+n-D}^{l_i-k+1} \\
 & \sum_{n_i=n+k}^n \sum_{n_i=n+k-j_s+1}^{(n_i-j_s)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{D-n+1} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{sa}-k-j_{sa}+2)} \sum_{j_i=j_s+s-1}^{l_i-k+1}
 \end{aligned}$$

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$$\begin{aligned}
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_s - s - 1)!}{(j_s + l_i - n - l_s - j_i - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{i=1}^{D+l_s+s-n-l_i} \sum_{j_s=l_i+n-D-s+1}^{j_{sa}-k-j_{sa}+2} \sum_{j_i=j_s+s-1}^{j_{sa}-k-j_{sa}+2} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^{-\mathbb{k}})}^{(\quad)} \\
 & \frac{(n_{is} + n_{ik} + j_s + j_{sa}^{ik} - n_s - j_i - s - 2 \cdot \mathbb{k} - j_{sa}^s)!}{(n_{is} + n_{ik} + 2 \cdot j_s + j_{sa}^{ik} - n_s - j_i - n - 2 \cdot \mathbb{k} - 2 \cdot j_{sa}^s)!} \cdot \\
 & \frac{1}{(n + j_{sa}^s - s - j_s)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge I = k \geq 0 \wedge$$

$$j_{sa}^s = j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, k, j_{sa}^i\} \wedge$$

$$s = 2 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$f_z^{SDOSD} = \sum_{k=1}^{D-n+1} \sum_{j_s=l_{ik}+n-D-j_{sa}^{ik}+1}^{(j_i-s+1)} \sum_{j_i=l_{ik}+s-k-j_{sa}^{ik}+1}^{(j_i-s+1)} \sum_{n_i=n+k}^{n} \sum_{n_{is}=n+k-j_s+1}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k}$$

$$\frac{(n_i - n_{is} - 1)!}{(i - l_i - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{D-n+1} \sum_{j_s=l_{ik}+n-D-j_{sa}^{ik}+1}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j_i=l_{ik}+s-k-j_{sa}^{ik}+2}^{l_{sa}+s-k-j_{sa}+1} \sum_{n_i=n+k}^{n} \sum_{n_{is}=n+k-j_s+1}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k}$$

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$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i - 1)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - 1)!}{(j_s + l_i - j_i - 1)! \cdot (j_i - j_s - 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{k=1}^{D+l_i-n-l_i} \sum_{j_i-s+1}^{n-l_i} \sum_{l_{sa}+n+s-D-j_{sa}}^{n_{ik}^{k+1}} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{k=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-k)} \frac{(n_{is} + n_{ik} + j_s + j_{sa}^{ik} - n_s - j_i - s - 2 \cdot k - j_{sa}^s)!}{(n_{is} + n_{ik} + j_s + j_{sa}^{ik} - n_s - j_i - n - 2 \cdot k - 2 \cdot j_{sa}^s)!} \cdot \frac{1}{(n + j_{sa}^s - s - j_s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq j_s \leq j_i - s + 1 \wedge$

$j_s + s - 1 \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$$D \geq n < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa}^s = j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s = 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{ik}+n-D-j_{sa}^i+1)}^{(l_{sa}+n-D-j_{sa})} \sum_{(j_i=l_{sa}+n-D-j_{sa})}^{(l_{sa}+s-k-j_{sa}+1)} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{(n_i-j_i-\mathbb{k})} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} + j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_{ik}-k-j_{sa}^i+2)} \sum_{j_i=j_s+s-1}^{(l_{sa}+s-k-j_{sa}+1)} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{(n_{is}+j_s-j_i-\mathbb{k})} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

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$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s - 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{j_s=l_{sa}+n}^{(l_{ik}-k-n)} \sum_{j_i=j_s+1}^{n} \sum_{n_i=n+k}^{(n_i-j_s+1)} \sum_{n_{is}=n+k}^{(n_{is}-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{(n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-k)} \sum_{j_i=s-2 \cdot k-j_{sa}^s}^{(n_{is}+n_{ik}+j_s+j_{sa}^s-n)} \frac{1}{(n + j_{sa}^s - s - j_s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D > n < n) \wedge (l_s - n + 1 \wedge 2 \leq j_s \leq j_i - s + 1 \wedge j_s + s - 1 \leq j_i \leq n \wedge l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee (D \geq n < n \wedge l_s > D - n + 1 \wedge 2 \leq j_s \leq j_i - s + 1 \wedge j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa}^s = j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s = 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_{z, j_i}^{DOSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(j_i-k)} \sum_{l_s+s-k}^{l_s+s-k} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{(n_{is}+j_s-j_i-\mathbb{k})}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)} \sum_{j_i=l_s+s-k+1}^{l_{sa}+s-k-j_{sa}+1}$$

$$\begin{aligned}
 & \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_s = n - j_i + 1}^{n_{is} + j_s - j_i - \mathbb{k}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_s - s - 1)!}{(j_s + l_i - n - l_s - s + 1)! \cdot (i_s - n - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=0}^{l_s + s - n - l_i} \sum_{(j_i = l_{sa} + n + s - D - j_{sa})}^{l_s + s - k} \\
 & \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \\
 & \sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik}}^{()} \sum_{(n_s = n_{ik} + j_s + j_{sa}^{ik} - j_i - j_{sa}^{ik})}^{()} \\
 & \frac{(n_{is} + n_{ik} + j_s + j_{sa}^{ik} - n_s - j_i - s - 2 \cdot \mathbb{k} - j_{sa}^s)!}{(n_{is} + n_{ik} + 2 \cdot j_s + j_{sa}^{ik} - n_s - j_i - n - 2 \cdot \mathbb{k} - 2 \cdot j_{sa}^s)!} \cdot \\
 & \frac{1}{(n + j_{sa}^s - s - j_s)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

$((D \geq n < n \wedge l_s > D - n + 1 \wedge$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa}^s = j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, k, j_{sa}^i\} \wedge$$

$$s = 2 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$\begin{aligned} \sum_{j_s, j_i}^{DOSD} &= \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_{sa}+n-D-j_{sa})} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{sa}+s-k-j_{sa}+1} \\ &\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k} \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ &\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\ &\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \end{aligned}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D-n+1} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_s-k-1)} \sum_{j_i=j_s+s-1}^{l_{sa}+s-k-j_{sa}+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+l_k}^{j_i-l_k}$$

$$\frac{(n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - j_s + 1)!}$$

$$\frac{(n_{is} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n - j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_s-k-1)} \sum_{j_i=j_s+s-1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-l_k)}$$

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$$\frac{(n_{is} + n_{ik} + j_s + j_{sa}^{ik} - n_s - j_i - s - 2 \cdot \mathbb{k} - j_{sa}^s)!}{(n_{is} + n_{ik} + 2 \cdot j_s + j_{sa}^{ik} - n_s - j_i - n - 2 \cdot \mathbb{k} - 2 \cdot j_{sa}^s)!}$$

$$\frac{1}{(n + j_{sa}^s - s - j_s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!}$$

$$\frac{(D - l_s)!}{(D + j_i - n - l_s)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$l_i \leq D + s - n \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa}^s = j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s = 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$fz S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(j_i-s+1)} \sum_{j_i=s+1}^{l_{ik}+s-k-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\begin{aligned}
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{i l - 1} \sum_{(j_s=2)}^{(l_{ik} - k - j_{sa}^{ik} + 2)} \sum_{i=l_{ik}+s-1}^{l_{ik}+1} \sum_{j_{sa}^{ik}+2}^{j_{sa}^{ik}+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-1)}^{(n_{is}=n+l_k)} \sum_{n_s=n-j_i+1}^{n_s=n-j_i} \\
 & \frac{(n_i - n_s - 1)!}{(j_s - 1)! \cdot (n_i - n_s - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=i}^l \sum_{(j_s=1)}^{l_i - i l + 1} \sum_{j_i=s}^{l_i - i l + 1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_s=n-j_i+1)}^{(n_i - j_i - l_k + 1)} \\
 & \frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot
 \end{aligned}$$

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$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$\sum_{k=1}^{i^l-1} \sum_{(j_s=j_i-s+1)}^{(\)} \sum_{j_i=s+1}^{l_{ik}+s-k-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+1}^n \sum_{(n_i+j_s+1)}^{(n_i+j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}+j_s+1}^n \sum_{(n_{ik}+j_s+1)}^{(n_{ik}+j_s+1)}$$

$$\frac{(n_{is} + n_{ik} + j_s + j_{sa}^{ik} - n_s - j_i - s - 2 \cdot \mathbb{k} - j_{sa}^s)!}{(n_{is} + n_{ik} + 2 \cdot j_s + j_{sa}^{ik} - n_s - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - 2 \cdot j_{sa}^s)!}$$

$$\frac{1}{(n + j_{sa}^s - s - j_s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=i^l}^{(\)} \sum_{(j_s=1)} \sum_{j_i=s}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_i-j_s-j_{sa}^{ik})}^{(\)} \sum_{n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-\mathbb{k}}$$

$$\frac{(n_i + n_{ik} + j_s + j_{sa}^{ik} - n_s - j_i - s - 2 \cdot \mathbb{k} - j_{sa}^s)!}{(n_i + n_{ik} + 2 \cdot j_s + j_{sa}^{ik} - n_s - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - 2 \cdot j_{sa}^s)! \cdot (n - s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l_i \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa}^s = j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, k, j_{sa}^i\} \wedge$$

$$s = 2 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$fz_{j_s, j_i}^{SDOSD} = \sum_{k=1}^{l-1} \sum_{j_i=j_s+s-1}^{n-k-j_{sa}^{ik}+1} \sum_{n_i=n+k}^n \sum_{n_s=n-j_i+1}^{n_i-j_i-k} \frac{(n_i - n_s - 1)!}{(j_s - k)! \cdot (n_i - n_s - j_s + 1)!} \cdot \frac{(n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_s + j_s - n_s - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{l-1} \sum_{j_s=1}^{l-1} \sum_{j_i=s}^{l-i+1}$$

$$\sum_{n_i=n+k}^n \sum_{n_s=n-j_i+1}^{n_i-j_i-k+1}$$

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$$\frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - j_s - 1)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$\sum_{k=1}^{i-1} \sum_{j=2}^{l_{ik} - i_{ik} + 2} \sum_{j_i=j_s+1}^{n - j_s + 1}$$

$$\sum_{n_i=n+l_k}^n \sum_{n_{is}=n+l_k}^{(n_i - j_s + 1)}$$

$$\sum_{n_{is}=n+l_k}^{(n_i - j_s + 1)} \sum_{n_s=n_{ik}+j_s+j_{sa}^{ik} - j_i - j_{sa}^s - l_k}^{(n_i - j_s + 1)}$$

$$\frac{(n_{is} + n_{ik} + j_s + j_{sa}^{ik} - n_s - j_i - s - 2 \cdot l_k - j_{sa}^s)!}{(n_{is} + n_{ik} + 2 \cdot j_s + j_{sa}^{ik} - n_s - j_i - n - 2 \cdot l_k - 2 \cdot j_{sa}^s)!}$$

$$\frac{1}{(n + j_{sa}^s - s - j_s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{i-1} \sum_{j_s=1}^{(n_i - j_s + 1)} \sum_{j_i=s}^{(n_i - j_s + 1)}$$

$$\sum_{n_i=n+l_k}^n \sum_{n_{ik}=n_i-j_s-j_{sa}^{ik}}^{(n_i - j_s + 1)} \sum_{n_s=n_{ik}+j_s+j_{sa}^{ik} - j_i - j_{sa}^s - l_k}^{(n_i - j_s + 1)}$$

$$\frac{(n_i + n_{ik} + j_s + j_{sa}^{ik} - n_s - j_i - s - 2 \cdot l_k - j_{sa}^s)!}{(n_i + n_{ik} + 2 \cdot j_s + j_{sa}^{ik} - n_s - j_i - n - 2 \cdot l_k - 2 \cdot j_{sa}^s)! \cdot (n - s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa}^s = j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s = 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$j_{sa}^{DOSD} = \sum_{j_i=1}^{n-1} \sum_{(j_s=2)}^{j_i-s+1} \sum_{j_i=l_i+n-D}^{l_{ik}+s-k-j_{sa}^{ik}+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\begin{aligned}
 & \sum_{k=1}^{i^{l-1} (l_{ik-k-j_{sa}^{ik}+2)} } \sum_{(j_s=2)}^{l_i-k+1} \sum_{j_i=l_{ik+s-k-j_{sa}^{ik}+2}}^{l_i-k+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i}^{n_{is}+j_s-j_i-l_k} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l_i - k + 1)!}{(j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_s - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^i \sum_{(j_s=1)}^{()} \sum_{j_i=l_i+n-D}^{l_i-i^{l+1}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_s=n-j_i+1)}^{(n_i-j_i-l_k+1)} \\
 & \frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -
 \end{aligned}$$

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$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_i-s+1)}^{(\)} \sum_{j_i=l_i+n-D}^{l_{ik}+s-k-j_{sa}^{ik}+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_{sa}^s-j_{sa}^{ik}}^{(\)} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_{sa}^s-k)}^{(\)} \frac{(n_{is} + n_{ik} + j_s + j_{sa}^{ik} - n_s - j_i - s - k - j_{sa}^s)!}{(n_{is} + n_{ik} + 2 \cdot j_s + j_{sa}^{ik} - n_s - j_i - n - 2 \cdot k - j_{sa}^s)!} \cdot \frac{1}{(n + j_s - s - j_s)!} \cdot \frac{(l_s - k)}{(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)!}$$

- $D \geq n < n \wedge l_s \leq D - n + 1 \wedge$
- $1 \leq j_s \leq j_i - s + 1 \wedge$
- $j_s + s - 1 \leq j_i \leq n \wedge$
- $l_s - j_{sa}^{ik} + j_s = l_s \wedge l_i - j_{sa}^{ik} - s > l_{ik} \wedge$
- $D + s - n < l_i \leq D + l_s + j_s - n - 1 \wedge$
- $D \geq n < n \wedge l = k \geq 1 \wedge$
- $j_{sa}^s = j_{sa}^i \wedge$
- $s: \{j_{sa}^i, j_{sa}^i\} \wedge$
- $s = 2 \wedge s = j_s + k \wedge$
- $k \geq 1 \Rightarrow$

$$fzS_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i^{l-1} (l_i+n-D-s)} \sum_{(j_s=2)}^{l_i-k+1} \sum_{j_i=l_i+n-D}$$

$$\begin{aligned}
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-l_k} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{i=l-1}^{i^l-1} \sum_{j_s=l_i+n-D-s+1}^{k-k-j_s^k+2} \sum_{j_i=j_s+s-1}^{l_i-k+1} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-l_k} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +
\end{aligned}$$

$$\sum_{k=1}^{D+l_s+s-1} \sum_{(j_s=1)}^{(l_i - l^{l+1})} \sum_{j_i=l_i+n-D}^{(n_i - j_i - l_k + 1)}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_s=n-j_i)}^{(n_i - j_i - l_k + 1)}$$

$$\frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n_s - j_i)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s - 1)! \cdot (j_i - s)!}$$

$$\frac{(l_i - l_s - 1)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-1} \sum_{(j_i=l_i+n-D-s+1)}^{(l_{ik-k} - l_{ik+2})} \sum_{j_i=j_s+s-1}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s - j_{sa}^{ik}}^{(n_i - j_s + 1)} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik} - j_i - j_{sa}^s - l_k)}$$

$$\frac{(j_s + n_{ik} + j_s + j_{sa}^{ik} - n_s - j_i - s - 2 \cdot l_k - j_{sa}^s)!}{(n_{is} + n_{ik} + 2 \cdot j_s + j_{sa}^{ik} - n_s - j_i - n - 2 \cdot l_k - 2 \cdot j_{sa}^s)!}$$

$$\frac{1}{(n + j_{sa}^s - s - j_s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_i - s + 1 \wedge$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa}^s = j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, k, j_{sa}^i\} \wedge$$

$$s = 2 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$f_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{j_i-s+1} \sum_{l_s=s-k}^{l_s+s-k} \sum_{n_i=n+k}^{n_i+j_s+1} \sum_{n_{is}=n+k-j_s+1}^{n_{is}+j_s-j_i-k} \sum_{n_s=n-j_i+1}^{n_s=n-j_i+1} \frac{(n_i - n_{is} - 1)!}{(i - l - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(l_s-k+1)} \sum_{j_i=l_s+s-k+1}^{l_{ik}+s-k-j_{sa}^{ik}+1} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k}$$

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$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - 1)!}{(j_s + l_i - j_i - 1)! \cdot (j_i - j_s + 1)!}$$

$$\frac{(n - l_i)!}{(n - j_i - 1)! \cdot (n - j_i)!}$$

$$\sum_{i=1}^n \sum_{j_s=1}^{l_i} \sum_{j_i=l_{ik}+n+s-D-j_s^{ik}}^{n_{ik}^{ik}+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_s=n-j_i+1)}^{(n_i-j_i-l_k+1)}$$

$$\frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_i-s+1)}^{()} \sum_{j_i=l_{ik}+n+s-D-j_s^{ik}}^{l_s+s-k}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{()} (n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-k)$$

$$\frac{(n_{is} + n_{ik} + j_s + j_{sa}^{ik} - n_s - j_i - s - 2 \cdot k - j_{sa}^s)!}{(n_{is} + n_{ik} + 2 \cdot j_s + j_{sa}^{ik} - n_s - j_i - n - 2 \cdot k - 2 \cdot j_{sa}^s)!}$$

$$\frac{1}{(n + j_{sa}^s - s - j_s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - l_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa}^s = j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}^i\} \wedge$$

$$s = 2 \wedge s = s + 1 \wedge$$

$$k_z: 2 \cdot 1 \Rightarrow$$

$$fz_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(l_{ik}+n-D-j_{sa}^{ik})} \sum_{j_i=l_{ik}+n+s-D-j_{sa}^{ik}}^{l_{ik}+s-k-j_{sa}^{ik}+1} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\begin{aligned}
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{i-1} \sum_{j_i=l_{ik}+n-D-j_s+1}^{(l_s-k+1) \cdot (l_i+s-j_s+1) \cdot j_s^{ik}+1} \sum_{n_i=n+l_k}^{(n_i-j_s+1) \cdot (n_{is}+j_s-j_i-l_k)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_s - n_s - 1)!}{(j_i - 2)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{i-1} \sum_{j_i=l_{ik}+n+s-D-j_s^{ik}}^{() \cdot l_{ik}+s- i^{l-j_s^{ik}+1}} \sum_{n_i=n+l_k}^n \sum_{n_s=n-j_i+1}^{(n_i-j_i-l_k+1)} \\
 & \frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!}
 \end{aligned}$$

GÜLDENWA

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_s-k+1)} \sum_{j_{sa}^{ik}=j_s-s-1}^{j_{sa}^{ik}=j_s-1}$$

$$\sum_{n_i=n-l_s}^n \sum_{n_{is}=n+l_k-j_s+1}^{n_{is}=n+l_k-j_s}$$

$$\sum_{n_{ik}=n_{is}-j_{sa}^{ik}}^{n_{ik}=n_{is}-j_{sa}^{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^{ik}-l_k}$$

$$\frac{(n_{is} + n_{ik} + j_s + j_{sa}^{ik} - n_s - j_i - s - 2 \cdot l_k - j_{sa}^s)!}{(n_{is} + n_{ik} + 2 \cdot j_{sa}^{ik} + j_{sa}^{ik} - n_s - j_i - s - n - 2 \cdot l_k - 2 \cdot j_{sa}^s)!}$$

$$\frac{1}{(n + j_{sa}^s - s - j_s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + j_s + j_{sa}^{ik} = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$(j_s + s - 1 \leq j_i - n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s \leq j_i \leq n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$l_i \leq D + s - n)) \wedge$$

$$D \geq n < n \wedge l_i - s + 1 \geq 0 \wedge$$

$$j_{sa}^s = j_{sa} - \mathbb{k} \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s = z, s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 =$$

$$fz S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(j_i-s+1)} \sum_{j_i=s+1}^{l_s+s-k}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 1)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(l_i)!}{(D + j_i - n - l_i)! \cdot (j_i)!} + \sum_{k=1}^{i-1} \sum_{j_s=1}^{(l_s - k + 1)} \sum_{n_i=n+l_k}^n \sum_{n_s=n+l_k-j_s+1}^{n_{is}+j_s-j_i-k} \frac{(n_i - n_{is} - 1)!}{(i - l)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^i \sum_{j_s=1}^{(l_s - i + 1)} \sum_{j_i=s}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_s=n-j_i+1)}^{(n_i-j_i-k+1)}$$

GÜLDÜZMAYA

$$\frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - 1)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$\sum_{k=0}^{l_i - (j_i - s + 1)} \sum_{j_i = j_i - s + 1}^{(n_i - j_i + 1) + s - k}$$

$$\sum_{n_i = n + k}^n \sum_{n_{is} = n_i - j_s + 1}^{(n_i - j_s + 1)}$$

$$\sum_{n_{is} = n_{is} + j_{sa}^s - j_{sa}^{ik}}^{(n_i - j_s + 1)} \sum_{n_s = n_{ik} + j_s + j_{sa}^{ik} - j_i - j_{sa}^s - k}^{(n_i - j_s + 1)}$$

$$\frac{(n_{is} + n_{ik} + j_s + j_{sa}^s - n_s - j_i - s - 2 \cdot k - j_{sa}^s)!}{(n_{is} + n_{ik} + 2 \cdot j_s + j_{sa}^{ik} - n_s - j_i - n - 2 \cdot k - 2 \cdot j_{sa}^s)!}$$

$$\frac{1}{(n + j_{sa}^s - s - j_s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=0}^{l_i} \sum_{j_s=1}^{(n_i - j_s + 1)} \sum_{j_i=s}^{(n_i - j_s + 1)}$$

$$\sum_{n_i = n + k}^n \sum_{n_{ik} = n_i - j_s - j_{sa}^{ik}}^{(n_i - j_s + 1)} \sum_{n_s = n_{ik} + j_s + j_{sa}^{ik} - j_i - j_{sa}^s - k}^{(n_i - j_s + 1)}$$

$$\frac{(n_i + n_{ik} + j_s + j_{sa}^{ik} - n_s - j_i - s - 2 \cdot k - j_{sa}^s)!}{(n_i + n_{ik} + 2 \cdot j_s + j_{sa}^{ik} - n_s - j_i - n - 2 \cdot k - 2 \cdot j_{sa}^s)! \cdot (n - s)!}$$

GÜLDENWA

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$((D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s$$

$$(l_i \leq D + s - n) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa}^s = j_{sa}^l - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}^l\} \wedge$$

$$s = 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned}
 f_z S_{j_s, j_i}^{DOSD} &= \sum_{k=1}^{l_i-1} \sum_{(j_s=2)}^{(l_s-k+1)} \sum_{j_i=j_s+s-1}^{l_i-k+1} \\
 &\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i}^{n_{is}+j_s-j_i-k} \\
 &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 &\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} - n_s - j_i)!} \cdot \\
 &\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 &\frac{(l_s - l_i - k + 1)!}{(l_s - l_i - s - 2)!} \cdot \\
 &\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 &\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!} + \\
 &\sum_{k=1}^{()} \sum_{(j_s=1)}^{l_i - i^{l+1}} \sum_{j_i=s} \\
 &\sum_{n_i=n+k}^n \sum_{(n_s=n-j_i+1)}^{(n_i-j_i-k+1)} \\
 &\frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!} \cdot \\
 &\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 &\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!} \cdot \\
 &\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!} -
 \end{aligned}$$

GÜLDÜMÜN

$$\begin{aligned}
 & \sum_{k=1}^{i^{l-1} (l_s - k + 1)} \sum_{(j_s=2)} \sum_{j_i=j_s+s-1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_i=n+l_k-j_s)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_{sa}^s-l_k)}^{()} \\
 & \frac{(n_{is} + n_{ik} + j_s + j_{sa}^{ik} - n_s - j_i - s - l_k - j_{sa}^s)!}{(n_{is} + n_{ik} + 2 \cdot j_s + j_{sa}^{ik} - n_s - j_i - n - 2 \cdot l_k - 2 \cdot j_{sa}^s)!} \cdot \\
 & \frac{1}{(n + j_i - s - j_s)!} \cdot \\
 & \frac{(l_s - k - j_s)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - j_i)!} \\
 & \sum_{k=i^l}^{()} \sum_{(j_s=1)} \sum_{j_i=s} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n_i-j_s-j_{sa}^{ik})}^{()} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-l_k)} \\
 & \frac{(n_i + n_{ik} + j_s + j_{sa}^{ik} - n_s - j_i - s - 2 \cdot l_k - j_{sa}^s)!}{(n_i + n_{ik} + 2 \cdot j_s + j_{sa}^{ik} - n_s - j_i - n - 2 \cdot l_k - 2 \cdot j_{sa}^s)! \cdot (n - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}
 \end{aligned}$$

$$((D \geq n < l_i) \wedge l_s \leq D - n + 1 \wedge$$

$$l_i - j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \wedge$$

$$D \geq n < n \wedge l_i - s + 1 > l_s \wedge$$

$$j_{sa}^s = j_{sa} - \mathbb{k} \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s = z, s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 =$$

$$fz S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(j_i-s+1)} \sum_{j_i=l_i+n-D}^{l_s+s-k}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(l_i)!}{(D + j_i - n - l_i)! \cdot (j_i)!} + \sum_{k=1}^{i-1} \sum_{j_s=0}^{(l_s - k + 1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k} \frac{(n_i - n_{is} - 1)!}{(i - l_i - k)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{i-1} \sum_{j_s=1}^{(l_i - i + 1)} \sum_{n_s=n-j_i+1}^{(n_i - j_i - k + 1)}$$

GÜLDÜMNA

$$\frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - l_s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{j_i=l_i+k}^{j_i-s-k} \binom{n-l_i-k}{j_i-s-k}$$

$$\sum_{n_i=n+l_k}^n \sum_{j_s=j_s+1}^{(n_i-j_s+1)}$$

$$\sum_{n_i=n+l_k}^n \sum_{j_s=j_s+1}^{(n_i-j_s+1)} \binom{n-l_i-k}{j_i-s-k}$$

$$\frac{(n_{is} + n_{ik} + j_s + j_{sa} - n - j_i - s - 2 \cdot l_k - j_{sa}^s)!}{(n_{is} + n_{ik} + 2 \cdot l_k + j_{sa}^{ik} - n_s - j_i - n - 2 \cdot l_k - 2 \cdot j_{sa}^s)!}$$

$$\frac{1}{(n + j_{sa}^s - s - j_s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_i \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_i + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa}^s = j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, k, j_{sa}^i\} \wedge$$

$$s = 2 \wedge s = k + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i^{l-1} (l_i + n - D - s)} \sum_{(j_s=2)}^{l_i - k + 1} \sum_{j_i = l_i + n - D}^{l_i - k + 1}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_s = n - j_i + 1}^{n_{is} + j_s - j_i - k}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\begin{aligned}
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{i-1} \sum_{(j_s=l_i+n-k+1)}^{(l_s-n-k+1)} \sum_{(j_i=j_s+n-k)}^{(n_i+n-k)} \frac{(n_i - j_s + 1)! \cdot (n_{is} + j_s - j_i - k)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_s - n_s - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=i}^{()} \sum_{(j_s=1)}^{l_i - i + 1} \sum_{j_i=l_i+n-D}^{()} \\
 & \sum_{n_i=n+k}^n \sum_{(n_s=n-j_i+1)}^{(n_i-j_i-k+1)} \\
 & \frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!} \cdot
 \end{aligned}$$

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$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)} \sum_{j_{s+1}^{s+1}}$$

$$\sum_{n_i=n}^n \sum_{(n_{is}=n+k-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}^{s-1} - j_{sa}^{ik} (n_{is}^{s-1} + j_s + j_{sa}^{ik} - j_i - j_{sa}^{s-k})}$$

$$\frac{(n_{is} + n_{ik} + j_s + j_{sa}^{ik} - n_s - j_i - s - 2 \cdot k - j_{sa}^s)!}{(n_{is} + n_{ik} + 2 \cdot j_s + j_{sa}^{ik} - n_s - j_i - s - n - 2 \cdot k - 2 \cdot j_{sa}^s)!}$$

$$\frac{1}{(n + j_{sa}^s - s - j_s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D + n + 1 \wedge$$

$$1 \leq j_s \leq j_{sa} + 1 \wedge$$

$$j_s + 1 \leq j_i =$$

$$l_{ik} - j_{sa}^{ik} + j_s = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_s < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge I = k \geq 0 \wedge$$

$$j_{sa}^s = j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, k, j_{sa}^i\} \wedge$$

$s = 2 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 1 \Rightarrow$

$$f_z^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(j_i-s+1)} \sum_{j_i=l_i+n-D}^{l_{sa+s-k-j_{sa}+1}} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s + j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(l_{sa}-k-j_{sa}+2)} \sum_{j_i=l_{sa}+s-k-j_{sa}+2}^{l_i-k+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

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$$\begin{aligned}
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{()} \sum_{(j_s=1)}^{l_i - i + 1} \sum_{j_i = n - D}^{n - D} \\
 & \sum_{n_i = n + k}^n \sum_{(n_s = n - j_i + 1)}^{(n_i - j_i + 1)} \\
 & \frac{(n_i - n_s)!}{(j_i - n_s)! \cdot (n_i - n_s - j_i + 1)!} \cdot \\
 & \frac{(n_s - j_i - n - 1)!}{(n_s - j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_i - l_s + 1)! \cdot (j_i - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} - \\
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_i-s+1)}^{()} \sum_{j_i=l_i+n-D}^{l_{sa}+s-k-j_{sa}+1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^{ik})}^{()} \\
 & \frac{(n_{is} + n_{ik} + j_s + j_{sa}^{ik} - n_s - j_i - s - 2 \cdot k - j_{sa}^s)!}{(n_{is} + n_{ik} + 2 \cdot j_s + j_{sa}^{ik} - n_s - j_i - n - 2 \cdot k - 2 \cdot j_{sa}^s)!} \cdot \\
 & \frac{1}{(n + j_{sa}^s - s - j_s)!} \cdot
 \end{aligned}$$

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$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa}^s = j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s = 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$z S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{l-1} \sum_{(j_s=2)}^{(l_i+n-D-s)} \sum_{j_i=l_i+n-D}^{l_i-k+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{i-1} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{sa}-k-j_{sa}+2)} \sum_{j_i=j_s+s-1}^{l_i-k+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-1}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_s - j_i + 1)!} \cdot$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_i + j_s - n_s - j_i)!} \cdot$$

$$\frac{(n_s - j_i - n - 1)!}{(n_s - j_i - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_i - j_s - k - 1)!}{(l_i - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s - l_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^i \sum_{(j_s=1)}^{()} \sum_{j_i=l_i+n-D}^{l_i-i+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_s=n-j_i+1)}^{(n_i-j_i-k+1)}$$

$$\frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

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$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{sa}-k-j_{sa}+2)} \sum_{j_i=j_s+s-1} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_{sa}^s-k)} \frac{(n_{is} + n_{ik} + j_s + j_{sa}^{ik} - n_s - j_i - s - k - j_{sa}^s)!}{(n_{is} + n_{ik} + 2 \cdot j_s + j_{sa}^{ik} - n_s - j_i - s - k - j_{sa}^s)!} \cdot \frac{1}{(n + s - s - j_s)!} \cdot \frac{(l_s - k)}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_i - s + 1 \wedge$

$j_s + s - 1 \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^s + j_s = l_s \wedge l_s + j_{sa}^{ik} - j_{sa}^s > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$D + s - n < l_i \leq D + l_s + s - n + 1 \wedge$

$D \geq l_i < n \wedge I = k \geq 1 \wedge$

$j_{sa}^s = j_{sa}^i \wedge$

$s: \{j_{sa}^i, j_{sa}^s\} \wedge$

$s = 2 \wedge s = j_s + k \wedge$

$l_i \geq 1 \Rightarrow$

$$fz S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(j_i-s+1)} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{ik}+s-k-j_{sa}^{ik}+1}$$

$$\begin{aligned}
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-l_k} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=2}^{i-l-1} \sum_{j_i=l_{ik}+s-k-j_{sa}^{ik}+2}^{(l_{ik}-j_{sa}^{ik}+2)} l_{sa}+s-k-j_{sa}+1 \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-l_k} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +
\end{aligned}$$

$$\sum_{k=1}^{()} \sum_{(j_s=1)}^{l_{sa}+s-i} \sum_{j_i=l_{sa}+n+s-D-j_{sa}+1}^{l_{sa}+s-i} \sum_{n_i=n+k}^n \sum_{(n_s=n-j)}^{(n_i-j_i-k+1)} \frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n_s - 1)! \cdot (n_s - j_i)!} \cdot \frac{(l_s - l_s - s + 1)!}{(l_s - j_i - l_s - 1)! \cdot (j_i - s)!} \cdot \frac{()}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

$$\sum_{k=1}^{D+l_s+s-n} \sum_{(j_s=1)}^{()} \sum_{j_i=l_{sa}+n+s-D-j_{sa}+1}^{l_{ik}+s-k-j_{sa}^{ik}+1} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-k)}^{()} \frac{(n_{is} + n_{ik} + j_s + j_{sa}^{ik} - n_s - j_i - s - 2 \cdot k - j_{sa}^s)!}{(n_{is} + n_{ik} + 2 \cdot j_s + j_{sa}^{ik} - n_s - j_i - n - 2 \cdot k - 2 \cdot j_{sa}^s)!} \cdot \frac{1}{(n + j_{sa}^s - s - j_s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_i - s + 1 \wedge$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa}^s = j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s = 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, l_i}^{DOSD} = \sum_{k=1}^{i-1} \sum_{j_s=l_{sa}+n-D-j_{sa}+k}^{l_{sa}+n-D-j_{sa}+s-k-j_{sa}+1} \sum_{j_i=j_s+1}^{n-j_s+1} \sum_{n_i=n+\mathbb{k}}^{n_i+j_s-j_i-\mathbb{k}} \sum_{n_s=n-j_i+1}^{n_s+n+\mathbb{k}-j_s+1} \frac{(n_i - n_{is} - 1)!}{(i - j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{i-1} \sum_{j_s=l_{sa}+n-D-j_{sa}+1}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j_i=j_s+s-1}^{l_{sa}+s-k-j_{sa}+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{n_{is}=n+\mathbb{k}-j_s+1}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}}$$

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$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - 1)!}{(j_s + l_i - j_i - 1)! \cdot (j_i - j_s + 1)!}$$

$$\frac{(n - l_i)!}{(n - l_i - 1)! \cdot (n - j_i)!}$$

$$\sum_{j_s=1}^{l_s} \sum_{j_i=l_s+n+s-D-j_s}^{l_s+n+s-D-j_s+1}$$

$$\sum_{n_i=n+k}^n \sum_{n_s=n-j_i+1}^{(n_i-j_i-k+1)}$$

$$\frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j_i=j_s+s-1}$$

$$\sum_{n_i=n+k}^n \sum_{n_{is}=n+k-j_s+1}^{(n_i-j_s+1)}$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}} \sum_{()} (n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-k)$$

$$\frac{(n_{is} + n_{ik} + j_s + j_{sa}^{ik} - n_s - j_i - s - 2 \cdot k - j_{sa}^s)!}{(n_{is} + n_{ik} + 2 \cdot j_s + j_{sa}^{ik} - n_s - j_i - n - 2 \cdot k - 2 \cdot j_{sa}^s)!}$$

$$\frac{1}{(n + j_{sa}^s - s - j_{sa}^s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - l_i)!}$$

$$((D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1)) \wedge$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1)) \wedge$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1)) \wedge$$

$$D \geq n < n \wedge I = k \geq 0 \wedge$$

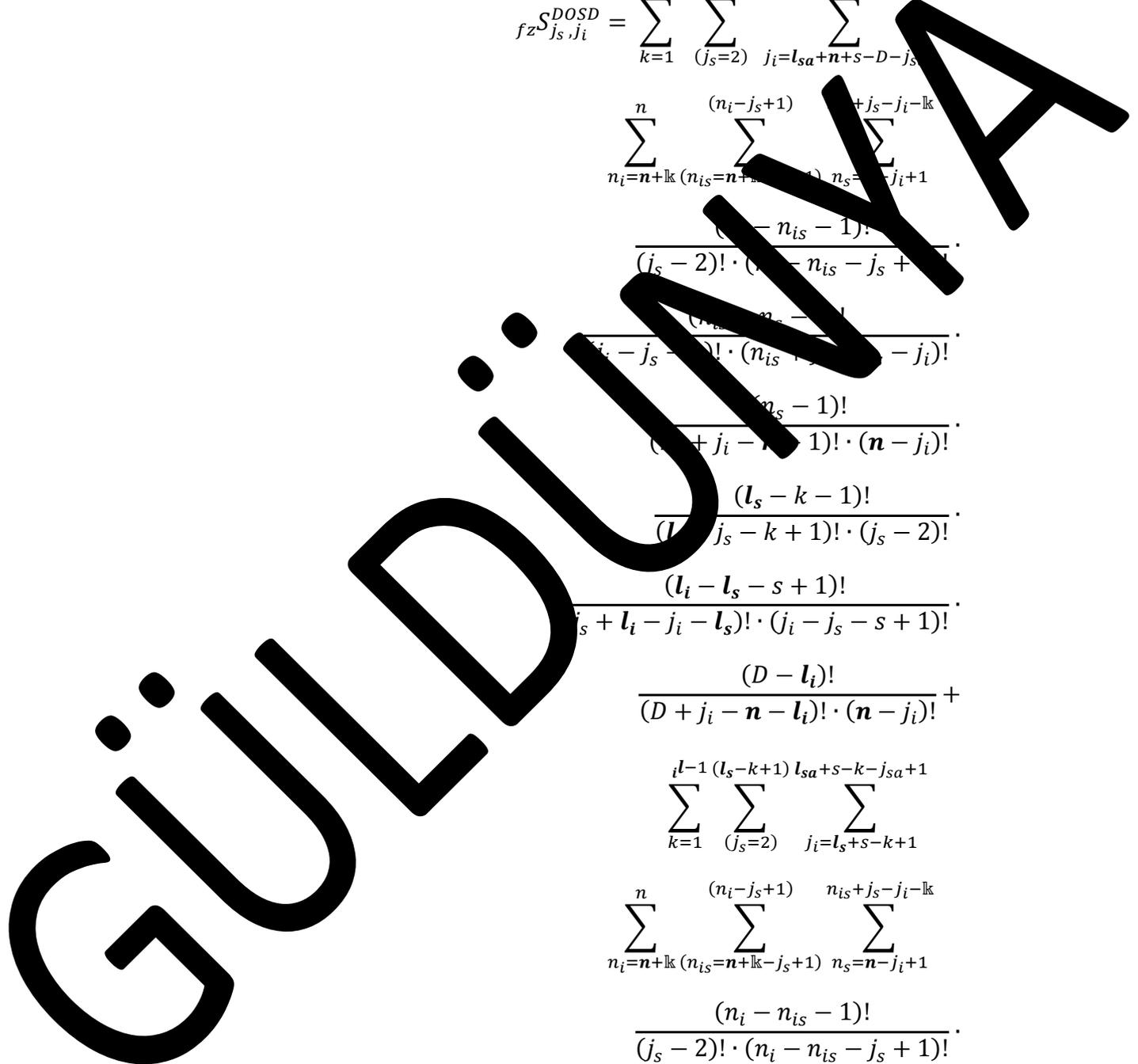
$$j_{sa}^s = j_{sa}^i - 1 \wedge$$

$s: \{j_{sa}^s, k, j_{sa}^i\} \wedge$

$s = 2 \wedge s = s + k \wedge$

$k_z: z = 1 \Rightarrow$

$$fz_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(j_i-s+1)} \sum_{j_i=l_{sa}+n+s-D-j_s}^{l_s+s-k} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(l_s-k+1)} \sum_{j_i=l_s+s-k+1}^{l_{sa}+s-k-j_{sa}+1} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$



$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{l_s} \sum_{(j_s=1)}^{l_s+s-k} \sum_{i=l_s+n+s-D-j_s}^{l_s+s-k-l-j_s+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_s=n-j_i+1)}$$

$$\frac{(n_i - n_s - j_i + 1)!}{(j_i - 1)! \cdot (n_i - n_s - j_i + 1)!}$$

$$\frac{(n_s - j_i - n - 1)! \cdot (n - j_i)!}{(n_s - j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_i - l_s + 1)! \cdot (j_i - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{l_s+s-n-l_i} \sum_{(j_s=j_i-s+1)}^{l_s+s-k} \sum_{j_i=l_s+n+s-D-j_s}^{l_s+s-k}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_i=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^{ik})}^{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^{ik})}$$

$$\frac{(n_{is} + n_{ik} + j_s + j_{sa}^{ik} - n_s - j_i - s - 2 \cdot l_k - j_{sa}^s)!}{(n_{is} + n_{ik} + 2 \cdot j_s + j_{sa}^{ik} - n_s - j_i - n - 2 \cdot l_k - 2 \cdot j_{sa}^s)!}$$

$$\frac{1}{(n + j_{sa}^s - s - j_s)!}$$

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$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 1 \wedge$$

$$j_{sa}^s = j_{sa}^l - s$$

$$s: \{l_{sa}, l_{sa}^{i_a}\} \wedge$$

$$s = 2 \wedge s = l_{sa} + \mathbb{k} \wedge$$

$$\mathbb{k} \geq 1 \Rightarrow$$

$$fz S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i_l-1} \sum_{(j_s=2)}^{(l_{sa}+n-D-j_{sa})} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{sa}+s-k-j_{sa}+1}$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-l_k} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=0}^{i^{l-1}} \sum_{j_i=j_s+1}^{(l_s-1)} \sum_{j_i=j_s+1}^{l_{sa}+s-k-j_{sa}+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-l_k} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +
 \end{aligned}$$

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$$\begin{aligned}
 & \sum_{k=1}^{l_s} \sum_{(j_s=1)}^{l_s+s-i} \sum_{j_i=l_s+n+s-D-j_s}^{l_s+s-i} \\
 & \sum_{n_i=n+k}^n \sum_{(n_s=n-j)}^{(n_i-j_i-k+1)} \\
 & \frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n_s - 1)! \cdot (n_s - j_i)!} \cdot \\
 & \frac{(l_s - l_s - s + 1)!}{(l_s - j_i - l_s - 1)! \cdot (j_i - s)!} \cdot \\
 & \frac{(l_s - 1)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{D+l_s+s-n} \sum_{(j_s=l_s+n-D-j_s+1)}^{(l_s-n)} \sum_{j_i=j_s+s-1}^{l_s-n} \\
 & \sum_{n_i=n+k}^n \sum_{(n_s=n+k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-k)}^{(l_s-n)} \\
 & \frac{(n_{is} + n_{ik} + j_s + j_{sa}^{ik} - n_s - j_i - s - 2 \cdot k - j_{sa}^s)!}{(n_{is} + n_{ik} + 2 \cdot j_s + j_{sa}^{ik} - n_s - j_i - n - 2 \cdot k - 2 \cdot j_{sa}^s)!} \cdot \\
 & \frac{1}{(n + j_{sa}^s - s - j_s)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq j_s \leq j_i - s + 1 \wedge$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k, j_{sa}^i\} \wedge$$

$$s > 2 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$f_z^{DOSD} = \sum_{k=1}^{D-n+1} \sum_{j_i=l_i+n-D-j_{sa}^{ik}+1}^{(j_i-s+1)} \sum_{j_i=l_i+n-D}^{l_{ik}-j_i^{k+1}} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s-j_i-k)} \sum_{n_s=n-j_i+1}^{(n_s-j_i-k)} \frac{(n_i-n_{is}-1)!}{(j_s-1)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_s-n_s-k-1)!}{(n_s-j_s-1)! \cdot (n_{is}+j_s-n_s-j_i-k)!} \cdot \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \frac{(l_i-l_s-s+1)!}{(j_s+l_i-j_i-l_s)! \cdot (j_i-j_s-s+1)!} \cdot \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j_i=l_{ik}+s-k-j_{sa}^{ik}+2}^{l_i-k+1} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k}$$

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$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - 1)!}{(j_s + l_i - j_i - 1)! \cdot (j_i - j_s - 1)!} \cdot \frac{(n - l_i)!}{(n - l_i - 1)! \cdot (n - j_i)!} \cdot \sum_{k=1}^{l_s + s - n + 1} \sum_{(j_s = j_i - k + 1)} \sum_{j_i = l_i + n - D}^{j_{sa}^{ik} + 1} \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{k = n_{is} + j_{sa}^s - j_{sa}^{ik}}^{(n_s = n_{ik} + j_s + j_{sa}^{ik} - j_i - j_{sa}^s - \mathbb{k})} \frac{(n_{is} + n_{ik} + j_s + j_{sa}^{ik} - n_s - j_i - s - 2 \cdot \mathbb{k} - j_{sa}^s)!}{(n_{is} + n_{ik} + j_s + j_{sa}^{ik} - n_s - j_i - n - 2 \cdot \mathbb{k} - 2 \cdot j_{sa}^s)!} \cdot \frac{1}{(n + j_{sa}^s - s - j_s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq j_s \leq j_i - s + 1 \wedge$

$j_s + s - 1 \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s > 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z^{SDOSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{ik}+n-j_s+1)}^{(l_i+n-D-s)} \sum_{j_i=l_{ik}+n-D}^{l_i-k+1} \sum_{n_i=n-j_i-\mathbb{k}}^{n-j_s+1} \sum_{n_s=n-j_i+1}^{n-(n_{is}=n+\mathbb{k}-j_s+1)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} + 1)!} \cdot \frac{(n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{D-n+1} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j_i=j_s+s-1}^{l_i-k+1} \sum_{n_i=n+\mathbb{k}}^{n-(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!}$$

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$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s - 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+1, \dots, D-s+1)}^{(l_{ik}-l_s+1, \dots, l_s+1)} \sum_{n_i=n+k}^n \sum_{(n_{is}=n_{is}-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{is}=n_{is}-j_{sa}^{ik}, \dots, n_{is}=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-k)}^{(n_{is}=n_{is}-j_{sa}^s-k)} \frac{(n_{is} + n_{ik} + j_s + j_{sa}^s - n - j_i - s - 2 \cdot k - j_{sa}^s)!}{(n_{is} + n_{ik} + 2 \cdot j_s + j_{sa}^{ik} - n_s - j_i - n - 2 \cdot k - 2 \cdot j_{sa}^s)!} \cdot \frac{1}{(n + j_{sa}^s - s - j_s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s = D - n + 1 \wedge 2 \leq j_s \leq j_s - s + 1 \wedge j_i + s - 1 \leq j_i \leq n \wedge l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge D \geq n < n \wedge I = k > 0 \wedge j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge \mathbf{s}: \{j_{sa}^s, \dots, k, j_{sa}^i\} \vee \mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, k, j_{sa}^i\} \wedge$$

$$s > 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$fz S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(j_i-s+1)} \sum_{j_i=l_{ik}+n+s-D-j_s^{ik}}^{l_s+s-k}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_s - l_s + 1)!}{(j_s + j_i - l_s - 1)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)} \sum_{j_i=l_s+s-k+1}^{l_{ik}+s-k-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

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$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_i-s+1)}^{(\)} \sum_{j_i=l_{ik}+n+s-D-j_{sa}^{ik}}^{l_s+s-k}$$

$$\sum_{n_i=n_{is}+j_{sa}^{ik}}^n \sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_i-j_{sa}^{s-k}}^{(j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_i-j_{sa}^{s-k}}^{(\)} \sum_{n_{ik}+j_{sa}^{ik}-j_i-j_{sa}^{s-k}}$$

$$\frac{(n_{is} + n_{ik} + j_s + j_{sa}^{ik} - n_s - s - 2 \cdot j_{sa}^{s-k})!}{(n_{is} + n_{ik} + 2 \cdot j_s + j_{sa}^{ik} - n_s - j_i - 2 \cdot \mathbb{k} - 2 \cdot j_{sa}^s)!}$$

$$\frac{1}{(n + j_{sa}^s - s - j_s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D > n < n \wedge D > D - l_i + 1 \wedge$$

$$2 \leq i_c \leq j_i - s + 1 \wedge$$

$$j_c + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 \leq l_c \wedge l_c - j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D > n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s > 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned}
 f_{zS}^{DOSD}_{j_s, j_i} &= \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_{ik}+n-D-j_s^{ik})} \sum_{j_i=l_{ik}+n+s-D-j_s^{ik}}^{l_{ik}+s-k-j_s^{ik}+1} \\
 &\quad \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i-k}^{n_{is}+j_s-j_i-k} \\
 &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 &\quad \frac{(n_{is} - n_s - k - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - k)!} \cdot \\
 &\quad \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 &\quad \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 &\quad \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 &\quad \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!} + \\
 &\quad \sum_{k=1}^{n+1} \sum_{(j_s=l_{ik}+n-D-j_s^{ik}+1)}^{(l_s-k+1)} \sum_{j_i=j_s+s-1}^{l_{ik}+s-k-j_s^{ik}+1} \\
 &\quad \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k} \\
 &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 &\quad \frac{(n_{is} - n_s - k - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - k)!} \cdot \\
 &\quad \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 &\quad \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 &\quad \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot
 \end{aligned}$$

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$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_s-k+1)} \sum_{j_i=j_s+s-1} \sum_{n_i=n+k}^n \sum_{(n_i-k-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik})}^{(n_{ik}+j_s+j_{sa}^{ik}-j_i-k)} \frac{(n_{is} + n_{ik} + j_s + j_{sa}^{ik} - n - j_i - s - 2 \cdot k - j_{sa}^s)!}{(n_{is} + n_{ik} + 2 \cdot j_s + j_{sa}^{ik} - n - j_i - s - 2 \cdot k - 2 \cdot j_{sa}^s)!} \cdot \frac{(n + j_{sa}^s - s - j_s)!}{(l_s - k - 1)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\begin{aligned} & ((D \geq n < n \wedge l_s > D - n + 1 \wedge \\ & 2 \leq j_s \leq j_i - s + 1 \wedge \\ & j_s + s - 1 \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik}) \vee \\ & ((D \geq n < n \wedge l_s > D - n + 1 \wedge \\ & 2 \leq j_s \leq j_i - s + 1 \wedge \\ & j_s + s - 1 \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik}) \vee \\ & ((D \geq n < n \wedge l_s > D - n + 1 \wedge \\ & 2 \leq j_s \leq j_i - s + 1 \wedge \\ & j_s + s - 1 \leq j_i \leq n \wedge \end{aligned}$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik}) \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k, j_{sa}^i\} \wedge$$

$$s > 2 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$fz S_{j_s j_i}^{DOSD} = \sum_{k=1}^{D-n+1} \sum_{\substack{(j_s-s+1) \\ (j_s+n-D) \\ j_i=l_i+s-k}}^{(j_s-s+1) \quad s-k} \frac{(n_i - j_s + 1) \quad n_{is} + j_s - j_i - k}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - k - 1)!}{(j_i - 1)! \cdot (n_{is} + j_s - n_s - j_i - k)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{D-n+1} \sum_{\substack{(l_s-k+1) \\ (j_s=l_s+n-D) \\ j_i=l_s+s-k+1}}^{(l_s-k+1) \quad l_i-k+1} \sum_{\substack{n \\ n_i=n+k \\ (n_{is}=n+k-j_s+1) \\ n_s=n-j_i+1}}^n \sum_{\substack{(n_i-j_s+1) \\ (n_{is}=n+k-j_s+1)}}^{(n_i-j_s+1)} \sum_{\substack{n_{is}+j_s-j_i-k \\ n_s=n-j_i+1}}^{n_{is}+j_s-j_i-k} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{n_i = n + \mathbb{k} - j_s + 1}^{D + l_s + s - n - l_i} \sum_{n_{is} = n + \mathbb{k} - j_s + 1}^{l_s + s - n - j_i} \sum_{n_s = n_{ik} + j_s + j_{sa}^{ik} - j_i - j_{sa}^s - \mathbb{k}}^{(n_i - j_s + 1)} \frac{(n_{is} + n_{ik} + j_{sa}^{ik} - n_s - j_i - s - 2 \cdot \mathbb{k} - j_{sa}^s)!}{(n_{is} + n_{ik} + 2 \cdot \mathbb{k} + j_{sa}^{ik} - n_s - j_i - n - 2 \cdot \mathbb{k} - 2 \cdot j_{sa}^s)!} \cdot \frac{1}{(n + j_{sa}^s - s - j_s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n) \wedge l_s > D - n + 1 \wedge l_i - j_s + 1 \leq j_i \leq n \wedge j_s + s - 1 \leq j_i \leq n \wedge l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik}) \vee (D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik})) \wedge$$

$$D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k, j_{sa}^i\}$$

$$s > 2 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$f_{z, j_s, \dots}^{S, D} = \sum_{k=1}^{D-n} \sum_{j_s=l_s+n-D}^{(l_i+n-D-s)} \sum_{j_i=l_i+n-D}^{l_i-k+1} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - k - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - k)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\begin{aligned}
 & \sum_{k=1}^{D-n+1} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)} \sum_{j_i=j_s+s-1}^{l_i-k+1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - k - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} - n_s - k - 1)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - j_s - k + 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - l_s)! \cdot (n - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D - l_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)} \sum_{j_i=j_s+s-1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-k)}^{(\quad)} \\
 & \frac{(n_{is} + n_{ik} + j_s + j_{sa}^{ik} - n_s - j_i - s - 2 \cdot k - j_{sa}^s)!}{(n_{is} + n_{ik} + 2 \cdot j_s + j_{sa}^{ik} - n_s - j_i - n - 2 \cdot k - 2 \cdot j_{sa}^s)!} \cdot \\
 & \frac{1}{(n + j_{sa}^s - s - j_s)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}
 \end{aligned}$$

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$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k, j_{sa}^i\} \wedge$$

$$s > 2 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$fzS_{j_s, j_i}^{DG} = \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(j_i-s+1)} \sum_{j_i=l_i+n-D}^{l_{sa}+s-k-j_{sa}+1} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - k - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - k)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{D-n+1} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_{sa}-k-j_{sa}+2)} \sum_{j_i=l_{sa}+s-k-j_{sa}+2}^{l_i-k+1}$$

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$$\begin{aligned}
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - 1)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_s - s - 1)!}{(j_s + l_i - n - l_s - s - 1)! \cdot (i_s - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{s=1}^{D+l_s+s-n-l_i} \sum_{j_s=j_i-s+1}^{()} \sum_{j_i=l_i+n-D}^{l_{sa}+s-k-j_{sa}+1} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^{ik})}^{()} \\
 & \frac{(n_{is} + n_{ik} + j_s + j_{sa}^{ik} - n_s - j_i - s - 2 \cdot \mathbb{k} - j_{sa}^s)!}{(n_{is} + n_{ik} + 2 \cdot j_s + j_{sa}^{ik} - n_s - j_i - n - 2 \cdot \mathbb{k} - 2 \cdot j_{sa}^s)!} \cdot \\
 & \frac{1}{(n + j_{sa}^s - s - j_s)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

$((D \geq n < n \wedge l_s > D - n + 1 \wedge$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k, j_{sa}^i\} \wedge$$

$$s > 2 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$\sum_{j_s=j_i}^{D-n+1} \sum_{j_i=j_s}^{D-s} \sum_{j_i=l_i+n-D}^{l_i-k+1} \sum_{n_i=n+k}^n \sum_{n_i=n+k-j_s+1}^{(n_i-j_s)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - k - 1)!}{(i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - k)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{D-n+1} \sum_{j_s=l_i+n-D-s+1}^{(l_{sa}-k-j_{sa}+2)} \sum_{j_i=j_s+s-1}^{l_i-k+1}$$

$$\begin{aligned}
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - 1)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_s - s - 1)!}{(j_s + l_i - n - l_s - 1)! \cdot (i_s - n - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{i=1}^{D+l_s+s-n-l_i} \sum_{j_s=l_i+n-D-s+1}^{j_{sa}-k-j_{sa}+2} \sum_{j_i=j_s+s-1}^n \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^{-\mathbb{k}})}^{(\quad)} \\
 & \frac{(n_{is} + n_{ik} + j_s + j_{sa}^{ik} - n_s - j_i - s - 2 \cdot \mathbb{k} - j_{sa}^s)!}{(n_{is} + n_{ik} + 2 \cdot j_s + j_{sa}^{ik} - n_s - j_i - n - 2 \cdot \mathbb{k} - 2 \cdot j_{sa}^s)!} \cdot \\
 & \frac{1}{(n + j_{sa}^s - s - j_s)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k, j_{sa}^i\} \wedge$$

$$s > 2 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$f_z^{S_{j_s, j_i}^{DOSD}} = \sum_{k=1}^{D-n+1} \sum_{j_s=l_{ik}+n-D-j_{sa}^{ik}+1}^{(j_i-s+1)} \sum_{j_i=l_{ik}+s-k-j_{sa}^{ik}+1}^{(j_i-s+1)} \sum_{n_i=n+k}^n \sum_{n_s=n-k-j_s+1}^{n_i+j_s-j_i-k} \sum_{n_s=n-j_i+1}^{n_i+j_s-j_i-k} \frac{(n_i - n_{is} - 1)!}{(i - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - k - 1)!}{(i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - k)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{D-n+1} \sum_{j_s=l_{ik}+n-D-j_{sa}^{ik}+1}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j_i=l_{ik}+s-k-j_{sa}^{ik}+1}^{l_{sa}+s-k-j_{sa}+1} \sum_{n_i=n+k}^n \sum_{n_s=n-k-j_s+1}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_i+j_s-j_i-k}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i - 1)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - 1)!}{(j_s + l_i - j_i - 1)! \cdot (j_i - j_s - 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{k=1}^{D+l_i-n-l_i} \sum_{j_i-s+1}^{n-l_i} \sum_{l_{sa}+n+s-D-j_{sa}}^{n_{ik}+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{k=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{()} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-\mathbb{k})}^{()} \frac{(n_{is} + n_{ik} + j_s + j_{sa}^{ik} - n_s - j_i - s - 2 \cdot \mathbb{k} - j_{sa}^s)!}{(n_{is} + n_{ik} + j_s + j_{sa}^{ik} - n_s - j_i - n - 2 \cdot \mathbb{k} - 2 \cdot j_{sa}^s)!} \cdot \frac{1}{(n + j_{sa}^s - s - j_s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq j_s \leq j_i - s + 1 \wedge$

$j_s + s - 1 \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s > 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{D-n+1} \sum_{\substack{j_s=l_{ik}+n-D-j_{sa}^{ik}+1 \\ (n_{is}=n+\mathbb{k}-j_s+1)}}^{l_{sa}+n-D-j_{sa}} \sum_{\substack{j_i=l_{sa}+s-k-j_{sa}+1 \\ (n_s=n-j_i+1)}}^{l_{sa}+s-k-j_{sa}+1} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!} \cdot \frac{(n_s - 1)!}{(j_i + j_s - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{D-n+1} \sum_{\substack{j_s=l_{sa}+n-D-j_{sa}+1 \\ (n_{is}=n+\mathbb{k}-j_s+1)}}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{\substack{j_i=j_s+s-1 \\ (n_s=n-j_i+1)}}^{l_{sa}+s-k-j_{sa}+1} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!}$$

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$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s - 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_{sa}+n_{ik}-j_{sa}+1) j_i=j_s+1}^{(l_{ik}-k-1) \binom{n}{j_s+1}} \sum_{n_i=n+k}^n \sum_{(n_i-j_s+1) \binom{n_i-j_s+1}{n_i-j_s+1}} \sum_{(n_{is}+n_{ik}-j_{sa}+j_s-n) \binom{n_{is}+n_{ik}-j_{sa}+j_s-n}{n_{is}+n_{ik}-j_{sa}+j_s-n}} \sum_{(n_{is}+n_{ik}+2 \cdot j_s+j_{sa}-n_s-j_i-n-2 \cdot k-2 \cdot j_{sa}^s)!}^{(n_{is}+n_{ik}-j_{sa}+j_s-n) \binom{n_{is}+n_{ik}-j_{sa}+j_s-n}{n_{is}+n_{ik}-j_{sa}+j_s-n}} \sum_{(n_{is}+n_{ik}-j_{sa}+j_s-n) \binom{n_{is}+n_{ik}-j_{sa}+j_s-n}{n_{is}+n_{ik}-j_{sa}+j_s-n}} \sum_{(n_{is}+n_{ik}-j_{sa}+j_s-n) \binom{n_{is}+n_{ik}-j_{sa}+j_s-n}{n_{is}+n_{ik}-j_{sa}+j_s-n}} \frac{1}{(n + j_{sa}^s - s - j_s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$((D > n < n) \wedge (l_s - n + 1 \wedge$

$2 \leq j_s \leq j_i - s + 1 \wedge$

$j_s + s - 1 \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$

$(D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq j_s \leq j_i - s + 1 \wedge$

$j_s + s - 1 \leq j_i \leq n \wedge$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s > 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_{z, j_i}^{DOSD} = \sum_{k=1}^{D-1} \sum_{(j_s=l_s+n-D)}^{(j_i-s-k)} \sum_{l_s+s-k}^{l_s+s-k} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)} \sum_{j_i=l_s+s-k+1}^{l_{sa}+s-k-j_{sa}+1}$$

$$\begin{aligned}
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - 1)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_s - s - 1)!}{(j_s + l_i - n - l_s - s + 1)! \cdot (i_s - n - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=0}^{n+l_s+s-n-l_i} \sum_{(j_i=n-s+1)}^{l_s+s-k} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{()} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^{ik})}^{()} \\
 & \frac{(n_{is} + n_{ik} + j_s + j_{sa}^{ik} - n_s - j_i - s - 2 \cdot \mathbb{k} - j_{sa}^s)!}{(n_{is} + n_{ik} + 2 \cdot j_s + j_{sa}^{ik} - n_s - j_i - n - 2 \cdot \mathbb{k} - 2 \cdot j_{sa}^s)!} \cdot \\
 & \frac{1}{(n + j_{sa}^s - s - j_s)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

$((D \geq n < n \wedge l_s > D - n + 1 \wedge$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}^i\} \vee s: \{j_{sa}^s, j_{sa}^{ik}, \mathbb{k}, j_{sa}^i\}$$

$$s > 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned} \sum_{j_s, j_i}^{DOSD} &= \sum_{k=1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_{sa}+n-D-j_{sa})} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{sa}+s-k-j_{sa}+1} \\ &\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}} \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ &\frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!} \cdot \\ &\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \end{aligned}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{D-n+1} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_s-k-1)} \sum_{j_i=j_s+s-1}^{l_{sa}+s-k-j_{sa}+1} \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+l_k}^{(n_i-j_s+1)} \frac{(n_{is}-1)!}{(j_s - 1)! \cdot (n_i - n_s + 1)!} \cdot \frac{(n_{is} - n_s - l_k - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - l_k)!} \cdot \frac{(n_s - 1)!}{(n - j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_s-k-1)} \sum_{j_i=j_s+s-1} \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+l_k}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-l_k)}^{()}$$

GÜLDÜZÜMÜ

A

$$\frac{(n_{is} + n_{ik} + j_s + j_{sa}^{ik} - n_s - j_i - s - 2 \cdot \mathbb{k} - j_{sa}^s)!}{(n_{is} + n_{ik} + 2 \cdot j_s + j_{sa}^{ik} - n_s - j_i - n - 2 \cdot \mathbb{k} - 2 \cdot j_{sa}^s)!}$$

$$\frac{1}{(n + j_{sa}^s - s - j_s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!}$$

$$\frac{(D - l_s)!}{(D + j_i - n - l_s)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$l_i \leq D + s - n \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}^i\} \vee s: \{j_{sa}^s, j_{sa}^{ik}, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s > 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$fz S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i^l-1} \sum_{(j_s=2)}^{(j_i-s+1)} \sum_{j_i=s+1}^{l_{ik}+s-k-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\begin{aligned}
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{i l - 1} \sum_{(j_s=2)}^{(l_{ik} - k - j_{sa}^{ik} + 2)} \sum_{i=l_{ik}+s-1}^{l_{ik}+1} \sum_{j_{sa}^{ik}+2}^{j_{sa}^{ik}+1} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-1)}^{(j_s+1)} \sum_{n_s=n-j_i+1}^{j_i-\mathbb{k}} \\
 & \frac{(n_i - n_s - \mathbb{k} - 1)!}{(j_s - 1)! \cdot (n_i - n_s - j_s + 1)!} \cdot \\
 & \frac{(n_i - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=i}^l \sum_{(j_s=1)}^{l_i - i l + 1} \sum_{j_i=s}^{l_i - i l + 1} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_s=n-j_i+1)}^{(n_i - j_i - \mathbb{k} + 1)} \\
 & \frac{(n_i - n_s - \mathbb{k} - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i - \mathbb{k} + 1)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot
 \end{aligned}$$

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$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$\sum_{k=1}^{i^l-1} \sum_{(j_s=j_i-s+1)}^{(\)} \sum_{j_i=s+1}^{l_{ik}+s-k-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+1}^n \sum_{(n_i+j_s+1)}^{(n_i+j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}+j_s+1}^n \sum_{(n_{ik}+j_s+1)}^{(n_{ik}+j_s+1)}$$

$$\frac{(n_{is} + n_{ik} + j_s + j_{sa}^{ik} - n_s - j_i - s - 2 \cdot \mathbb{k} - j_{sa}^s)!}{(n_{is} + n_{ik} + 2 \cdot j_s + j_{sa}^{ik} - n_s - j_i - s - 2 \cdot \mathbb{k} - 2 \cdot j_{sa}^s)!}$$

$$\frac{1}{(n + j_{sa}^s - s - j_s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=i^l}^{(\)} \sum_{(j_s=1)} \sum_{j_i=s}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_i-j_s-j_{sa}^{ik})}^{(\)} \sum_{n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-\mathbb{k}}$$

$$\frac{(n_i + n_{ik} + j_s + j_{sa}^{ik} - n_s - j_i - s - 2 \cdot \mathbb{k} - j_{sa}^s)!}{(n_i + n_{ik} + 2 \cdot j_s + j_{sa}^{ik} - n_s - j_i - n - 2 \cdot \mathbb{k} - 2 \cdot j_{sa}^s)! \cdot (n - s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l_i \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k, j_{sa}^i\} \wedge$$

$$s > 2 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$fz_{j_s, j_i}^{SDOSD} = \sum_{k=1}^{l-1} \sum_{j_i=j_s+s-1}^{n-k-j_{sa}^{ik}+1} \sum_{n_i=n+k}^n \sum_{n_s=n-j_i+1}^{n_i-j_i-k} \frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_i - n_s - k - 1)!}{(n_s - 1)! \cdot (n_i + j_s - n_s - j_i - k)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^l \sum_{j_s=1}^{l-i} \sum_{j_i=s}^{l-i+1}$$

$$\sum_{n_i=n+k}^n \sum_{n_s=n-j_i+1}^{n_i-j_i-k+1}$$

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$$\frac{(n_i - n_s - \mathbb{k} - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i - \mathbb{k} + 1)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - j_s - 1)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$\sum_{k=1}^{i-1} \sum_{j=2}^{l_{ik} - i_{ik} + 2} \sum_{j_i=j_s+1}^{n - j_s + 1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{n_{is}=n - j_s + 1}^{(n_i - j_s + 1)}$$

$$\sum_{n_{is}+j_{sa}^{ik} - j_{sa}^{ik} = n_{ik} + j_s + j_{sa}^{ik} - j_i - j_{sa}^s - \mathbb{k}}$$

$$\frac{(n_{is} + n_{ik} + j_s + j_{sa}^{ik} - n_s - j_i - s - 2 \cdot \mathbb{k} - j_{sa}^s)!}{(n_{is} + n_{ik} + 2 \cdot j_s + j_{sa}^{ik} - n_s - j_i - n - 2 \cdot \mathbb{k} - 2 \cdot j_{sa}^s)!}$$

$$\frac{1}{(n + j_{sa}^s - s - j_s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=i}^l \sum_{j_s=1}^{()} \sum_{j_i=s}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{n_{ik}=n_i - j_s - j_{sa}^{ik}}^{()} \sum_{n_s=n_{ik} + j_s + j_{sa}^{ik} - j_i - j_{sa}^s - \mathbb{k}}$$

$$\frac{(n_i + n_{ik} + j_s + j_{sa}^{ik} - n_s - j_i - s - 2 \cdot \mathbb{k} - j_{sa}^s)!}{(n_i + n_{ik} + 2 \cdot j_s + j_{sa}^{ik} - n_s - j_i - n - 2 \cdot \mathbb{k} - 2 \cdot j_{sa}^s)! \cdot (n - s)!}$$

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$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s > 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$j_{sa}^{DOSD} = \sum_{j_i=1}^{n-1} \sum_{(j_s=2)}^{(j_i-s+1)} \sum_{j_i=l_i+n-D}^{l_{ik}+s-k-j_{sa}^{ik}+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\begin{aligned}
 & \sum_{k=1}^{i^{l-1} (l_{ik-k-j_{sa}^{ik}+2)} } \sum_{(j_s=2)}^{l_i-k+1} \sum_{j_i=l_{ik+s-k-j_{sa}^{ik}+2}}^{l_i-k+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i}^{n_{is}+j_s-j_i-l_k} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - l_k - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n - l_k)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l_i - k + 1)!}{(j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_s - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^i \sum_{(j_s=1)}^{()} \sum_{j_i=l_i+n-D}^{l_i-i^{l+1}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_s=n-j_i+1)}^{(n_i-j_i-l_k+1)} \\
 & \frac{(n_i - n_s - l_k - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i - l_k + 1)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -
 \end{aligned}$$

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$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_i-s+1)}^{()} l_{ik+s-k-j_{sa}^{ik}+1} \sum_{j_i=l_i+n-D}^{(n_i-j_s+1)} \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_{sa}^{ik})}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{()} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_{sa}^{s-k})}^{(n_{ik}-j_i-s)} \frac{(n_{is} + n_{ik} + j_s + j_{sa}^{ik} - n_s - j_i - s - l_k - j_{sa}^{s-k})!}{(n_{is} + n_{ik} + 2 \cdot j_s + j_{sa}^{ik} - n_s - j_i - n - 2 \cdot l_k - j_{sa}^{s-k})!} \cdot \frac{1}{(n + j_s - s - j_s)!} \cdot \frac{(l_s - k - j_{sa}^{s-k})!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

- $D \geq n < n \wedge l_s \leq D - n + 1 \wedge$
- $1 \leq j_s \leq j_i - s + 1 \wedge$
- $j_s + s - 1 \leq j_i - 1 \wedge$
- $l_s - j_{sa}^{ik} + j_s - 1 = l_s \wedge l_i - j_{sa}^{ik} - s > l_{ik} \wedge$
- $D + s - n < l_i \leq D + l_s + j_s - n - 1 \wedge$
- $D \geq n < n \wedge l = l_k > 1 \wedge$
- $j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^i - 1 \wedge$
- $s: \{j_{sa}^i, l_k, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, l_k, j_{sa}^i\} \wedge$
- $s > 2 \wedge s = j_{sa}^i + l_k \wedge$
- $l_k \geq 2 \Rightarrow$

$$fzS_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i^{l-1} (l_i+n-D-s)} \sum_{(j_s=2)}^{l_i-k+1} \sum_{j_i=l_i+n-D}$$

$$\begin{aligned}
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{i=0}^{i^{l-1}} \sum_{j_s=l_i+n-D-s+1}^{k-k-j_s^{i\mathbb{k}+2})} \sum_{j_i=j_s+s-1}^{l_i-k+1} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +
 \end{aligned}$$

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$$\begin{aligned}
 & \sum_{k=1}^{l_i} \sum_{(j_s=1)}^{l_i - l_i + 1} \sum_{j_i = l_i + n - D}^{l_i - l_i + 1} \\
 & \sum_{n_i = n + k}^n \sum_{(n_s = n - j)}^{(n_i - j_i - k + 1)} \\
 & \frac{(n_i - n_s - k - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i - k + 1)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s - 1)! \cdot (j_i - s)!} \cdot \\
 & \frac{(l_i - 1)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{D + l_s + s - 1} \sum_{(j_i = l_i + n - D - s + 1)}^{(l_{ik} - k - l_{ik} + 2)} \sum_{j_i = j_s + s - 1}^{l_i - l_i + 1} \\
 & \sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s + 1)}^{(n_i - j_s + 1)} \\
 & \sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik}} \sum_{(n_s = n_{ik} + j_s + j_{sa}^{ik} - j_i - j_{sa}^s - k)}^{(j_s + n_{ik} + j_s + j_{sa}^{ik} - n_s - j_i - s - 2 \cdot k - j_{sa}^s)!} \\
 & \frac{(j_s + n_{ik} + j_s + j_{sa}^{ik} - n_s - j_i - s - 2 \cdot k - j_{sa}^s)!}{(n_{is} + n_{ik} + 2 \cdot j_s + j_{sa}^{ik} - n_s - j_i - n - 2 \cdot k - 2 \cdot j_{sa}^s)!} \cdot \\
 & \frac{1}{(n + j_{sa}^s - s - j_s)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_i - s + 1 \wedge$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k, j_{sa}^i\} \wedge$$

$$s > 2 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$f_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(j_i-s+1)} \sum_{l_s=s-k}^{l_s+s-k} \sum_{n_i=n+k}^{n_i+j_s-1} \sum_{n_{is}=n+k-j_s+1}^{n_{is}+j_s-j_i-k} \sum_{n_s=n-j_i+1}^{n_s} \frac{(n_i - n_{is} - 1)!}{(i - l_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - k - 1)!}{(i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - k)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(l_s-k+1)} \sum_{j_i=l_s+s-k+1}^{l_{ik}+s-k-j_{sa}^{ik}+1} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - s + 1)! \cdot (j_i - j_s - s + 1)!} \cdot$$

$$\frac{(n - l_i)!}{(n - j_i - n + l_i)! \cdot (n - j_i)!}$$

$$\sum_{i=1}^n \sum_{j_s=1}^{l_{ik}} \sum_{j_i=l_{ik}+n+s-D-j_s^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_s=n-j_i+1)}^{(n_i-j_i-\mathbb{k}+1)}$$

$$\frac{(n_i - n_s - \mathbb{k} - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i - \mathbb{k} + 1)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_i-s+1)}^{()} \sum_{j_i=l_{ik}+n+s-D-j_s^{ik}}^{l_s+s-k}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^{i_s}-j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^{i_s}-\mathbb{k})}^{()}$$

$$\frac{(n_{is} + n_{ik} + j_s + j_{sa}^{ik} - n_s - j_i - s - 2 \cdot \mathbb{k} - j_{sa}^{i_s})!}{(n_{is} + n_{ik} + 2 \cdot j_s + j_{sa}^{ik} - n_s - j_i - n - 2 \cdot \mathbb{k} - 2 \cdot j_{sa}^{i_s})!}$$

$$\frac{1}{(n + j_{sa}^{i_s} - s - j_{sa}^{i_s})!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{i_s} - s = l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^{i_s} - 1 \wedge j_{sa}^{i_s} \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^{i_s}, \dots, \mathbb{k}, j_{sa}^{i_s}\} \vee \{j_{sa}^{i_s}, \dots, j_{sa}^{i_s}, \mathbb{k}, j_{sa}^{i_s}\} \wedge$$

$$s > 2 \wedge s = s - 1 \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$fz_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(l_{ik}+n-D-j_{sa}^{ik})} \sum_{j_i=l_{ik}+n+s-D-j_{sa}^{ik}}^{l_{ik}+s-k-j_{sa}^{i_s}+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!}$$

$$\begin{aligned}
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \\
 & \sum_{k=1}^{l-1} \sum_{j_i=l_{ik}+n-D-j_s+1}^{(l_s-k+1)} \sum_{j_i=j_s+s-1}^{l_k+s-1} \binom{l_k+s-1}{j_i} \binom{l_s-k+1}{j_i} \\
 & \sum_{n_i=n+k}^{(n_i-j_s+1)} \sum_{n_s=n+k-j_s+1}^{n_{is}+j_s-j_i-k} \sum_{n_s=n-j_i+1}^{(n_i-j_s+1)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - k - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - k)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{l-1} \sum_{j_i=l_{ik}+n+s-D-j_s}^{(l_s-k+1)} \sum_{j_i=l_{ik}+n+s-D-j_s}^{l_k+s-1} \binom{l_k+s-1}{j_i} \binom{l_s-k+1}{j_i} \\
 & \sum_{n_i=n+k}^n \sum_{n_s=n-j_i+1}^{(n_i-j_i-k+1)} \\
 & \frac{(n_i - n_s - k - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i - k + 1)!}
 \end{aligned}$$

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$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_s-k+1)} \sum_{j_{sa}^{ik}=s-1}^{j_{sa}^{ik}=s-1}$$

$$\sum_{n_i=n}^n \sum_{n_{is}=n+l_k-j_s+1}^{n_{is}=n+l_k-j_s+1}$$

$$n_{ik}=n_{is} \sum_{j_{sa}^{ik}=s-1}^{j_{sa}^{ik}=s-1} (n_{is} + n_{ik} + j_s + j_{sa}^{ik} - j_i - j_{sa}^{ik} - l_k)$$

$$\frac{(n_{is} + n_{ik} + j_s + j_{sa}^{ik} - n_s - j_i - s - 2 \cdot l_k - j_{sa}^s)!}{(n_{is} + n_{ik} + 2 \cdot j_{sa}^{ik} + j_{sa}^{ik} - n_s - n - 2 \cdot l_k - 2 \cdot j_{sa}^s)!}$$

$$\frac{1}{(n + j_{sa}^s - s - j_s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + j_{sa}^{ik} = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$(j_{sa}^{ik} - n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s \leq j_i \leq n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$l_i \leq D + s - n)) \wedge$$

$$D \geq n < n \wedge l_i - s + 1 > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^s - k \wedge j_{sa}^s \leq j_i - k - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k, j_{sa}^i\} \in \mathcal{S}; \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}^s\} \wedge$$

$$s > z \wedge s = s + k \wedge$$

$$k_z: z = 1 =$$

$$fz S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(j_i-s+1)} \sum_{j_i=s+1}^{l_s+s-k}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - k - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - k)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(l_i)!}{(D + j_i - n - l_i)! \cdot (j_i)!} +$$

$$\sum_{k=1}^{i-1} \sum_{j_s=1}^{(l_s-k+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k} \dots$$

$$\frac{(n_i - n_{is} - 1)!}{(i - l_i)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - k - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - k)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^i \sum_{j_s=1}^{(l_i-k+1)} \sum_{j_i=s}^{l_i-i+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_s=n-j_i+1)}^{(n_i-j_i-k+1)}$$

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$$\frac{(n_i - n_s - \mathbb{k} - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i - \mathbb{k} + 1)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - 1)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$\sum_{k=0}^{i-l} \sum_{j_i=j_i-s+1}^{n-s-k} \binom{n-s-k}{j_i}$$

$$\sum_{n_i=n+\mathbb{k}}^n \binom{n_i-j_s+1}{n_i-j_s+1}$$

$$\sum_{n_i=n+\mathbb{k}} \sum_{n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-\mathbb{k}} \binom{n_i-j_s+1}{n_i-j_s+1}$$

$$\frac{(n_i + n_{ik} + j_s + j_{sa}^{ik} - n_s - j_i - s - 2 \cdot \mathbb{k} - j_{sa}^s)!}{(n_i + n_{ik} + 2 \cdot j_s + j_{sa}^{ik} - n_s - j_i - n - 2 \cdot \mathbb{k} - 2 \cdot j_{sa}^s)!}$$

$$\frac{1}{(n + j_{sa}^s - s - j_s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=i}^l \sum_{j_s=1}^{()} \sum_{j_i=s}^{()}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{n_{ik}=n_i-j_s-j_{sa}^{ik}}^{()} \sum_{n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-\mathbb{k}}$$

$$\frac{(n_i + n_{ik} + j_s + j_{sa}^{ik} - n_s - j_i - s - 2 \cdot \mathbb{k} - j_{sa}^s)!}{(n_i + n_{ik} + 2 \cdot j_s + j_{sa}^{ik} - n_s - j_i - n - 2 \cdot \mathbb{k} - 2 \cdot j_{sa}^s)! \cdot (n - s)!}$$

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$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$((D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s$$

$$(l_i \leq D + s - n) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^l - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s > 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned}
 f_z S_{j_s, j_i}^{DOSD} &= \sum_{k=1}^{i-l-1} \sum_{(j_s=2)}^{(l_s-k+1)} \sum_{j_i=j_s+s-1}^{l_i-k+1} \\
 &\sum_{n_i=n+k}^n \sum_{(n_{i_s}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i}^{n_{i_s}+j_s-j_i-k} \\
 &\frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \\
 &\frac{(n_{i_s} - n_s - k - 1)!}{(j_i - j_s - 1)! \cdot (n_{i_s} + j_s - n - k)!} \cdot \\
 &\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 &\frac{(l_s - l_i - k + 1)!}{(l_s - l_i - s + 1)!} \cdot \\
 &\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 &\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!} + \\
 &\sum_{k=i}^{()} \sum_{(j_s=1)}^{l_i - i^{l+1}} \sum_{j_i=s} \\
 &\sum_{n_i=n+k}^n \sum_{(n_s=n-j_i+1)}^{(n_i-j_i-k+1)} \\
 &\frac{(n_i - n_s - k - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i - k + 1)!} \cdot \\
 &\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 &\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!} \cdot \\
 &\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!} -
 \end{aligned}$$

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$$\begin{aligned}
 & \sum_{k=1}^{i^{l-1} (l_s - k + 1)} \sum_{(j_s=2)} \sum_{j_i=j_s+s-1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_i=n+l_k-j_s)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_{sa}^s-l_k)}^{(\quad)} \\
 & \frac{(n_{is} + n_{ik} + j_s + j_{sa}^{ik} - n_s - j_i - s - l_k - j_{sa}^s)!}{(n_{is} + n_{ik} + 2 \cdot j_s + j_{sa}^{ik} - n_s - j_i - n - 2 \cdot l_k - 2 \cdot j_{sa}^s)!} \cdot \\
 & \frac{1}{(n + j_i - s - j_s)!} \cdot \\
 & \frac{(l_s - k - j_s)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - j_i)!} \\
 & \sum_{k=i^l}^{(\quad)} \sum_{(j_s=1)} \sum_{j_i=s} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n_i-j_s-j_{sa}^{ik})}^{(\quad)} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-l_k)} \\
 & \frac{(n_i + n_{ik} + j_s + j_{sa}^{ik} - n_s - j_i - s - 2 \cdot l_k - j_{sa}^s)!}{(n_i + n_{ik} + 2 \cdot j_s + j_{sa}^{ik} - n_s - j_i - n - 2 \cdot l_k - 2 \cdot j_{sa}^s)! \cdot (n - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}
 \end{aligned}$$

$$((D \geq n < l_i) \wedge l_s \leq D - n + 1 \wedge$$

$$l_i - j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \wedge$$

$$D \geq n < n \wedge l_i - l_s > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^s - k \wedge j_{sa}^s \leq j_i - k - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k, j_{sa}^i\} \in \mathcal{S}; \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}^s\} \wedge$$

$$s > z \wedge s = s + k \wedge$$

$$k_z: z = 1 \wedge$$

$$fz S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(j_i-s+1)} \sum_{j_i=l_i+n-D}^{l_s+s-k} \\ \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k} \\ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - k - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - k)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(l_i)!}{(D + j_i - n - l_i)! \cdot (j_i)!} +$$

$$\sum_{k=1}^{i-1} \sum_{j_s=0}^{(l_s-k-1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k} \sum_{n_i=n+k}^{n-j_s+1} \sum_{n_s=n+k-j_s+1}^{n_{is}+j_s-j_i-k}$$

$$\frac{(n_i - n_{is} - 1)!}{(i - l_i)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - k - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - k)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{i-1} \sum_{j_s=1}^{(l_s-k-1)} \sum_{j_i=l_i+n-D}^{l_i-i+1}$$

$$\sum_{n_i=n+k}^n \sum_{n_s=n-j_i+1}^{(n_i-j_i-k+1)}$$

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$$\frac{(n_i - n_s - \mathbb{k} - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i - \mathbb{k} + 1)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - l_s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{j_i=l_i+k}^{j_i-s-k} \binom{n-l_i-k}{j_i-s-k}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{j_s=j_s+1}^{(n_i-j_s+1)}$$

$$\sum_{n_i=n+\mathbb{k}} \sum_{j_s=j_s+1}^{(n_i-j_s+1)} \binom{n-l_i-k}{j_i-s-k}$$

$$\frac{(n_{is} + n_{ik} + j_s + j_{sa} - n - j_i - s - 2 \cdot \mathbb{k} - j_{sa}^s)!}{(n_{is} + n_{ik} + 2 \cdot \mathbb{k} + j_{sa}^{ik} - n_s - j_i - n - 2 \cdot \mathbb{k} - 2 \cdot j_{sa}^s)!}$$

$$\frac{1}{(n + j_{sa}^s - s - j_s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_i \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_i + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}^i\} \quad s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \dots, j_{sa}^i\} \wedge$$

$$s > 2 \wedge s = \mathbb{k} + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i^{l-1} (l_i + n - D - s)} \sum_{(j_s=2)}^{l_i - k + 1} \sum_{j_i = l_i + n - D}^{n_{is} + j_s - j_i - \mathbb{k}}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_s = n - j_i + 1}^{n_{is} + j_s - j_i - \mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!}$$

$$\begin{aligned}
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \\
 & \sum_{k=1}^{i-1} \sum_{j_s=l_i+1}^{l_s-k+1} \sum_{j_i=j_s+1}^{l_s-k+1} \frac{(n_i - j_s + 1)! \cdot (n_{is} + j_s - j_i - k)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \\
 & \sum_{n_i=n+k}^{n_i+l_i} \sum_{n_s=n+k-j_s+1}^{n_s+l_i-j_s+1} \sum_{j_i=j_s+1}^{n_i-j_s+1} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \\
 & \frac{(n_{is} - n_s - k - 1)!}{(j_i - 2)! \cdot (n_{is} + j_s - n_s - j_i - k)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=i}^{l_i} \sum_{j_s=1}^{l_i-k+1} \sum_{j_i=l_i+n-D}^{l_i-k+1} \\
 & \sum_{n_i=n+k}^n \sum_{n_s=n-j_i+1}^{(n_i-j_i-k+1)} \\
 & \frac{(n_i - n_s - k - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i - k + 1)!}
 \end{aligned}$$

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$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)} \sum_{j_{s+1}^{s+1}}$$

$$\sum_{n_i=n}^n \sum_{(n_{is}=n+k-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}^{s-1} - j_{sa}^{ik} (n_{is}^{s-1} + j_s + j_{sa}^{ik} - j_i - j_{sa}^{s-k})}$$

$$\frac{(n_{is} + n_{ik} + j_s + j_{sa}^{ik} - n_s - j_i - s - 2 \cdot k - j_{sa}^s)!}{(n_{is} + n_{ik} + 2 \cdot j_s + j_{sa}^{ik} - n_s - j_i - s - n - 2 \cdot k - 2 \cdot j_{sa}^s)!}$$

$$\frac{1}{(n + j_{sa}^s - s - j_s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D + n + 1 \wedge$$

$$1 \leq j_s \leq j_{s+1} \wedge s + 1 \wedge$$

$$j_s + 1 \leq j_i =$$

$$l_{ik} - j_{sa}^{ik} + j_s = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_s < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k, j_{sa}^i\} \wedge$$

$s > 2 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 1 \Rightarrow$

$$\begin{aligned}
 f_z^{DOSD} = & \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(j_i-s+1)} \sum_{j_i=l_i+n-D}^{l_{sa}+s-k-j_{sa}+1} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - 1)!}{(j_i - j_s) \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s + j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_s - l_s - s + 1)!}{(j_s + l_s - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(l_{sa}-k-j_{sa}+2)} \sum_{j_i=l_{sa}+s-k-j_{sa}+2}^{l_i-k+1} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}
 \end{aligned}$$

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$$\begin{aligned}
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{(j_s - l_i - l_s + 1)} \sum_{(j_s=1)}^{(j_s - l_i - l_s + 1)} \sum_{j_i=l_i+n-D}^{(j_s - l_i - l_s + 1)} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_s=n-j_i+1)}^{(n_i - j_s + 1)} \\
 & \frac{(n_i - l_s - k)!}{(j_i - 2)! \cdot (n_i - n_s - j_i - k + 1)!} \cdot \\
 & \frac{(n_s + j_i - n - 1)! \cdot (n - j_i)!}{(l_i - l_s - s + 1)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_i - l_s + 1)! \cdot (j_i - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} - \\
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_i-s+1)}^{(j_s - l_i - l_s + 1)} \sum_{j_i=l_i+n-D}^{l_{sa}+s-k-j_{sa}+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i - j_s + 1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^{ik})}^{(j_s - l_i - l_s + 1)} \\
 & \frac{(n_{is} + n_{ik} + j_s + j_{sa}^{ik} - n_s - j_i - s - 2 \cdot k - j_{sa}^s)!}{(n_{is} + n_{ik} + 2 \cdot j_s + j_{sa}^{ik} - n_s - j_i - n - 2 \cdot k - 2 \cdot j_{sa}^s)!} \cdot \\
 & \frac{1}{(n + j_{sa}^s - s - j_s)!} \cdot
 \end{aligned}$$

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$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s > 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned} z S_{j_s, j_i}^{DOSD} &= \sum_{k=1}^{l-1} \sum_{(j_s=2)}^{(l_i+n-D-s)} \sum_{j_i=l_i+n-D}^{l_i-k+1} \\ &\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}} \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \\ &\frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!} \\ &\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\ &\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \\ &\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \end{aligned}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{i-1} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{sa}-k-j_{sa}+2)} \sum_{j_i=j_s+s-1}^{l_i-k+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{=n-j_i+1}^{n_{is}+j_s-}$$

$$\frac{(n_i - n_{is} - \mathbb{k} - 1)!}{(j_s - 2)! \cdot (n_i - n_s - j_i - \mathbb{k} + 1)!} \cdot$$

$$\frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!} \cdot$$

$$\frac{(n_s - j_i - n - 1)!}{(n_s - j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_i - j_s - k - 1)!}{(l_i - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s - l_i - l_s)! \cdot (j_i - j_s - s + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{()} \sum_{(j_s=1)}^{l_i - i l + 1} \sum_{j_i=l_i+n-D}$$

$$\sum_{n_i=n+k}^n \sum_{(n_s=n-j_i+1)}^{(n_i-j_i-k+1)}$$

$$\frac{(n_i - n_s - \mathbb{k} - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i - \mathbb{k} + 1)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

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$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{sa}-k-j_{sa}+2)} \sum_{j_i=j_s+s-1}^{(n_i-j_s+1)} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_{sa}^s-k)} \frac{(n_{is}+n_{ik}+j_s+j_{sa}^{ik}-n_s-j_i-s-k-j_{sa}^s)!}{(n_{is}+n_{ik}+2 \cdot j_s+j_{sa}^{ik}-n_s-j_i-s-k-j_{sa}^s)!} \cdot \frac{1}{(n+k-j_s)!} \cdot \frac{(l_s-k)}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \frac{(l_i-l_i)!}{(D-j_i-n-l_i)! \cdot (n-j_i)!}$$

$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_i - s + 1 \wedge$

$j_s + s - 1 \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + j_s = l_s \wedge l_s + j_{sa}^{ik} - j_{sa}^s > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$D + s - n < l_i \leq D + l_s + 1 - n + 1 \wedge$

$D \geq l_i < n \wedge I = k > 1 \wedge$

$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^i - 1 \wedge$

$s: \{j_{sa}^i, \dots, k, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k, j_{sa}^i\} \wedge$

$s > 2 \wedge s = j_s + k \wedge$

\Rightarrow

$$fz S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(j_i-s+1)} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{ik}+s-k-j_{sa}^{ik}+1}$$

$$\begin{aligned}
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=2}^{i^{l-1} (l_{ik} - j_{sa}^{ik} + 2)} \sum_{j_i=l_{ik}+s-k-j_{sa}^{ik}+1}^{l_{sa}+s-k-j_{sa}+1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +
\end{aligned}$$

$$\begin{aligned}
 & \sum_{k=1}^{\binom{D+l_s+s-n}{j_s=1}} \sum_{j_i=l_{sa}+n+s-D-j_{sa}+1}^{l_{sa}+s-i-l-j_{sa}+1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_s=n-j)}^{(n_i-j_i-k+1)} \\
 & \frac{(n_i - n_s - k - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i - k + 1)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - l_s - s + 1)!}{(l_s - j_i - l_s - 1)! \cdot (j_i - s)!} \cdot \\
 & \frac{\binom{D+l_s+s-n}{j_s=1}}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{D+l_s+s-n} \sum_{j_i=l_{sa}+n+s-D-j_{sa}+1}^{\binom{D+l_s+s-n}{j_s=1}} \sum_{j_i=l_{sa}+n+s-D-j_{sa}+1}^{l_{ik}+s-k-j_{sa}^{ik}+1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-k)}^{\binom{D+l_s+s-n}{j_s=1}} \\
 & \frac{(n_{is} + n_{ik} + j_s + j_{sa}^{ik} - n_s - j_i - s - 2 \cdot k - j_{sa}^s)!}{(n_{is} + n_{ik} + 2 \cdot j_s + j_{sa}^{ik} - n_s - j_i - n - 2 \cdot k - 2 \cdot j_{sa}^s)!} \cdot \\
 & \frac{1}{(n + j_{sa}^s - s - j_s)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_i - s + 1 \wedge$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k, j_{sa}^i\} \wedge$$

$$s > 2 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, l_i}^{DOSD} = \sum_{k=1}^{i-1} \sum_{j_s=l_{sa}+n-D-j_{sa}+k}^{l_{sa}+n-D-j_{sa}+s-k-j_{sa}+1} \sum_{j_i=j_s+1}^{n-j_s+1} \sum_{n_i=n+k}^{n-j_s+1} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k} \frac{(n_i - n_{is} - 1)!}{(i - j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - k - 1)!}{(i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - k)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{i-1} \sum_{j_s=l_{sa}+n-D-j_{sa}+1}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j_i=j_s+s-1}^{l_{sa}+s-k-j_{sa}+1} \sum_{n_i=n+k}^n \sum_{n_{is}=n+k-j_s+1}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-k}$$

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$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - s + 1)! \cdot (j_i - j_s + 1)!}$$

$$\frac{(n - l_i)!}{(n - j_i - n + l_i)! \cdot (n - j_i)!}$$

$$\sum_{j_s=1}^{l_s} \sum_{j_i=l_s+n+s-D-j_s}^{l_s+n+s-D-j_s+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_s=n-j_i+1)}^{(n_i-j_i-\mathbb{k}+1)}$$

$$\frac{(n_i - n_s - \mathbb{k} - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i - \mathbb{k} + 1)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s + 1)! \cdot (j_i - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j_i=j_s+s-1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}} \sum_{()} (n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^s-k)$$

$$\frac{(n_{is} + n_{ik} + j_s + j_{sa}^{ik} - n_s - j_i - s - 2 \cdot k - j_{sa}^s)!}{(n_{is} + n_{ik} + 2 \cdot j_s + j_{sa}^{ik} - n_s - j_i - n - 2 \cdot k - 2 \cdot j_{sa}^s)!}$$

$$\frac{1}{(n + j_{sa}^s - s - j_{sa}^s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (l_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - l_i)!}$$

$$((D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1)) \wedge$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s + 1 \wedge$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1)) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - s$$

$$j_s + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1)) \wedge$$

$$D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}^i\} \wedge$$

$$s > 2 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$fz_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(j_i-s+1)} \sum_{j_i=l_{sa}+n+s-D-j_s}^{l_s+s-k} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(j_i - i - 1)! \cdot (n_{is} + j_s - n_s - \mathbb{k} - 1)!}{(j_i - i - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(l_s-k+1)} \sum_{j_i=l_s+s-k+1}^{l_{sa}+s-k-j_{sa}+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

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A

$$\begin{aligned}
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{l_s+s-n-l_i} \sum_{(j_s=1)}^{(l_s+s-k)} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_s+s-k} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_s=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \frac{(n_i - l_s - k - 1)!}{(n_i - n_s - j_i - k + 1)!} \cdot \\
 & \frac{(n_s + j_i - n - 1)! \cdot (n - j_i)!}{(l_i - l_s - s + 1)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_i - l_s + 1)! \cdot (j_i - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} - \\
 & \sum_{k=1}^{l_s+s-n-l_i} \sum_{(j_s=j_i-s+1)}^{(l_s+s-k)} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_s+s-k} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_i=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{(l_s+s-k)} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^{ik})}^{(n_i-j_s+1)} \\
 & \frac{(n_{is} + n_{ik} + j_s + j_{sa}^{ik} - n_s - j_i - s - 2 \cdot k - j_{sa}^s)!}{(n_{is} + n_{ik} + 2 \cdot j_s + j_{sa}^{ik} - n_s - j_i - n - 2 \cdot k - 2 \cdot j_{sa}^s)!} \cdot \\
 & \frac{1}{(n + j_{sa}^s - s - j_s)!} \cdot
 \end{aligned}$$

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$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$((D \geq n < n \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_i - s + 1 \wedge$

$j_s + s - 1 \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$

$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_i - s + 1 \wedge$

$j_s + s - 1 \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$

$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_i - s + 1 \wedge$

$j_s + s - 1 \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$D + s - n < l_i \leq D + l_s + s - n - 1) \wedge$

$D \geq n < n \wedge I = \mathbb{k} > 1 \wedge$

$j_{sa}^{ik} = j_{sa}^i - j_{sa}^s \leq j_i - 1 \wedge$

$s: \{j_{sa}, \dots, \mathbb{k}, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}^i\} \wedge$

$s > 2 \wedge s = j_s + \mathbb{k} \wedge$

$\mathbb{k} \geq 1 \Rightarrow$

$$fz S_{j_s, j_i}^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(l_{sa}+n-D-j_{sa})} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{sa}+s-k-j_{sa}+1}$$

$$\begin{aligned}
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=0}^{i^{l-1}} \frac{(l_s - 1)!}{(D - j_{sa} + 1)!} \sum_{j_i=j_s+s-1}^{l_{sa}+s-k-j_{sa}+1} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_i-\mathbb{k}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_s - \mathbb{k} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_s - j_i - \mathbb{k})!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i - j_s - s + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +
 \end{aligned}$$

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$$\begin{aligned}
 & \sum_{k=1}^l \sum_{(j_s=1)}^{()} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{sa}+s-i^{l-j_{sa}+1}} \\
 & \sum_{n_i=n+k}^n \sum_{(n_s=n-j)}^{(n_i-j_i-k+1)} \\
 & \frac{(n_i - n_s - k - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i - k + 1)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_i - l_s - s + 1)!}{(l_i - j_i - l_s - 1)! \cdot (j_i - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{D+l_s+s-n} \sum_{(j_s=1)}^{(l_s-n)} \sum_{j_i=j_s+s-1}^{n-D-j_{sa}+1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}}^{()} \sum_{(n_s=n_{ik}+j_s+j_{sa}^{ik}-j_i-j_{sa}^{ik})}^{()} \\
 & \frac{(n_{is} + n_{ik} + j_s + j_{sa}^{ik} - n_s - j_i - s - 2 \cdot k - j_{sa}^s)!}{(n_{is} + n_{ik} + 2 \cdot j_s + j_{sa}^{ik} - n_s - j_i - n - 2 \cdot k - 2 \cdot j_{sa}^s)!} \cdot \\
 & \frac{1}{(n + j_{sa}^s - s - j_s)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

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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 bağımlı-bir 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 bağımlı-bir bağımsız durumlu bağımsız 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-bir 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-bir 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 ve 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

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 bağımlı 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, 2.3.1.3.7.6.1.1/12

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 durumlu bağımsız
simetrisinin ilk herhangi iki ve son
durumunun bulunabileceği olaylara göre
herhangi bir ve son durumuna bağlı

simetrik olasılık,
2.3.1.1.10.2.1.1/12-13

toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.10.2.1.1/23

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı 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 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 durumlu bağımsız
simetrisinin ilk herhangi iki ve son
durumunun bulunabileceği olaylara göre
herhangi bir ve son durumuna bağlı

simetrik olasılık,
2.3.1.1.10.4.1.1/12-13

toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.10.4.1.1/23

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı 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 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 durumlu bağımsız
simetrisinin ilk herhangi iki ve son
durumunun bulunabileceği olaylara göre
herhangi bir ve son durumuna bağlı

simetrik olasılık,
2.3.1.1.10.6.1.1/12-13

toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.10.6.1.1/23

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı 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,
2.3.1.1.11.2.1/16
toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.11.1.2.1/17

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı durumlu bağımsız
simetrisinin ilk herhangi iki ve son
durumunun bulunabileceği olaylara göre
herhangi iki ve son durumuna bağlı
simetrik olasılık,
2.3.1.1.11.3.1/16
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 durumlu bağımsız simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

simetrik olasılık,
2.3.1.1.11.4.2.1/16

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.11.4.2.1/30

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımlı simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

simetrik olasılık,
2.3.1.1.11.4.3.1/16

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.11.4.3.1/30

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu 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 durumlu bağımsız simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

simetrik olasılık,
2.3.1.1.11.6.2.1/16

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.11.6.2.1/30

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımlı simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

simetrik olasılık,
2.3.1.1.11.6.3.1/16

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.11.6.3.1/30

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu 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 durumlu bağımsız simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

simetrik olasılık,
2.3.1.1.11.7.2.1/29

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.11.7.2.1/30

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu bağımlı simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

simetrik olasılık,
2.3.1.1.11.7.3.1/16

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 ve son durumunun bulunabileceği olaylara göre toplam düzgün olmayan simetrik olasılığın, tanım ve eşitliklerinden oluşmaktadır.

VDOİHİ Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrisinin ilk ve son durumunun bulunabileceği olaylara göre toplam düzgün olmayan simetrik olasılığın, tanım ve eşitliklerinden oluşmaktadır. VDOİHİ kitabında, bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz dağılımlarında, simetrisinin ilk ve son durumunun bulunabileceği olaylara göre düzgün olmayan simetrik olasılığın, tanım ve eşitlikleri verilmektedir.

VDOİHİ'nin diğer ciltlerinde olduğu gibi bu ciltte de verilen ana eşitlikler, olasılık tablolarından elde edilen verilerle üretilmiştir. Diğer eşitlikler ise ana eşitliklerden teorik yöntemle üretilmiştir. Eşitlik ve tanımların üretilmesinde dış kaynak kullanılmamıştır.

GÜLDÜNKAYA