

# VDOİHİ

Bağımlı ve Bir Bağımsız Olasılıklı  
Farklı Dizilimsiz Bağımlı Durumlu  
Simetrisinin Herhangi İki Durumuna  
Bağı Tek Kalan Düzgün Olmayan  
Simetrik Olasılık

Cilt 2.3.3.3.4.1.1.16

İsmail YILMAZ

**Matematik / İstatistik / Olasılık**

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**VDOİHİ Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrisinin herhangi iki durumuna bağlı tek kalan düzgün olmayan simetrik olasılık Cilt 2.3.3.3.4.1.1.16**

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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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**GÜLDÜNYA**

## Simge ve Kısaltmalar

$n$ : olay sayısı

$n$ : bağımlı olay sayısı

$m$ : bağımsız olay sayısı

$l$ : bağımsız durum sayısı

$L$ : simetrimin bağımsız durum sayısı

$l$ : simetrimin bağımlı durumlarından önce bulunan bağımsız durum sayısı

$L$ : simetrimin bağımlı durumlarından sonra bulunan bağımsız durum sayısı

$k$ : simetrimin bağımlı durumları arasındaki bağımsız durumların sayısı

$k$ : dağılımın başladığı bağımlı durumun, bağımlı olasılıklı farklı dizilimsiz dağılımlardaki sırası

$l$ : ilgilenilen bağımlı durumun, bağımlı olasılıklı farklı dizilimsiz dağılımlardaki sırası

$l$ : simetrimin ilk bağımlı durumunun, bağımlı olasılık farklı dizilimsiz dağılımın son olayı için sırası. Simetrimin sonuncu bağımlı olayındaki durumun, bağımlı olasılık farklı dizilimsiz dağılımlardaki sırası

$l_i$ : simetrimin son bağımlı durumunun, bağımlı olasılıklı farklı dizilimsiz dağılımlardaki sırası. Simetrimin birinci bağımlı olayındaki durumun, bağımlı olasılık farklı dizilimsiz dağılımlardaki sırası

$l_s$ : simetrimin ilk bağımlı durumunun, bağımlı olasılıklı farklı dizilimsiz

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

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

$l_{sa}$ : simetrimin aranacağı bağımlı durumunun, bağımlı olasılıklı farklı dizilimsiz dağılımlardaki sırası. Simetrimin aranacağı bağımlı olayındaki durumun, bağımlı olasılık farklı dizilimsiz dağılımlardaki sırası

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

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

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

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

durum arasında bağımsız durumun bulunduğu bağımsız durumdan önceki bağımlı durumun bağımlı olasılıklı dağılımlarda bulunabileceği olayların son olaydan itibaren sırası

$j_{sa}^{ik}$ :  $j_{ik}$ 'da bulunan durumun simetriyi oluşturan bağımlı durumlar arasında bulunduğu olayın son olaydan itibaren sırası

$j_{x_{ik}}$ : simetrinin ikinci olayındaki durumun, olasılık dağılımlarının son olaydan itibaren bulunabileceği olayın sırası

$j_s$ : simetrinin ilk bağımlı durumunun, bağımlı olasılıklı dağılımlarda bulunabileceği olayların, son olaydan itibaren sırası

$j_{sa}^s$ : simetriyi oluşturan bağımlı durumlar arasında simetrinin ilk bağımlı durumunun bulunduğu olayın, simetrinin son olayından itibaren sırası ( $j_{sa}^s = 1$ )

$j_{sa}$ : simetriyi oluşturan bağımlı durumlar arasında simetrinin aranacağı durumun bulunduğu olayın, simetrinin son olayından itibaren sırası

$j^{sa}$ :  $j_{sa}$ 'da bulunan durumun bağımlı olasılıklı dağılımda bulunduğu olayın son olaydan itibaren sırası

$D$ : bağımlı durum sayısı

$D_i$ : olayın durum sayısı

$s$ : simetrinin bağımlı durum sayısı

$s$ : simetrik durum sayısı. Simetrinin bağımlı ve bağımsız durum sayısı

$m$ : olasılık

$M$ : olasılık dağılım sayısı

$U$ : uyum eşitliği

$u$ : uyum derecesi

$s_i$ : olasılık dağılımı

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

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

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

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

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

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

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

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

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

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

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

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

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

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bağımsız veya bağımlı-bağımsız veya bağımsız-bağımsız durumlu bağımsız simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı tek kalan simetrik olasılık

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

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

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bağımlı simetrisinin herhangi iki durumuna bağlı tek kalan düzgün simetrik olasılık

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

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$fz, 0S_{j_s, j_{ik}, j_i^{sa}, j_i}^{DOST}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı

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

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# E2

## BAĞIMLI ve BİR BAĞIMSIZ OLASILIKLI FARKLI DİZİLİMSİZ DAĞILIMLAR

### Bağımlı ve Bir Bağımsız Olasılıklı Farklı Dizilimsiz Dağılımlar

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

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

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

Bağımlı dağılım ve bir bağımsız olasılıklı durumla oluşturulabilen dağılımlara ve bağımlı olasılıklı dağılımların kendi olay sayısından (bağımlı olay sayısı) büyük olmasına (bağımlı olay sayısı) dağılımla bağımlı ve bir bağımsız olasılıklı dağılımlar elde edilir. Bağımlı dağılım farklı dizilimsiz dağılımlarda oluşturduğunda, bu dağılımlara bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz dağılımlar denir. Bağımlı ve bir bağımsız olasılıklı dağılımlar; bağımlı dağılımlara, bağımsız durumlar ilk durumdan dağıtılmaya başlanarak tabloları elde edilir. Bu bölümde verilen eşitlikler, bu yöntemle elde edilen kurallı 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 tanımlama eşitlikleri verilmektedir.

Farklı dizilimsiz dağılımlarda simetrinin durumlarının olasılık dağılımındaki sırasına göre simetrik olasılıkları etkilediğinden, bu bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz dağılımları da etkiler. Bu nedenle bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz dağılımlarda, simetrinin durumlarının bulunabileceği olaylara göre simetrik olasılık eşitlikleri, simetrinin durumlarının olasılık dağılımındaki sıralamalarına göre ayrı ayrı verilecektir. Bu eşitliklerin elde edilmesinde bağımlı olasılıklı farklı dizilimsiz dağılımlarda simetrinin durumlarının bulunabileceği olaylara göre çıkarılan eşitlikler kullanılmaktadır. Bu eşitlikler, bir bağımlı ve bir bağımsız olasılıklı dağılımlar için VDO'nun Çizim 1'de çıkarılan eşitliklerle birleştirilerek, bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz dağılımların yeni eşitlikleri elde edilecektir. Eşitlikleri adlandırılmasında bağımlı olasılıklı farklı dizilimsiz dağılımlarda kullanılan adlandırmalar kullanılacaktır. Bu adların altına simetrinin bağımlı ve bağımsız durumlarına göre ve dağılımın bağımsız veya bağımlı durumla başlamasına göre "Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı/bağımsız-bağımlı/bağımlı-bir bağımsız/bağımlı-bağımsız/bağımsız-bağımsız/bağımsız-bağımsız 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 dağılımlardaki sırasına göre verilen eşitliklerdeki toplam sınıra sınır değerleri, simetrinin küçükten-büyük sıralanan dağılımlarına göre verildiğinden bu dağılımlarda da aynı sıralama kullanılmaya devam edilecektir. Bağımlı olasılıklı farklı dizilimsiz dağılımlarda olduğu gibi bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz dağılımlarda da aynı eşitliklerde simetrinin durum sayıları düzenleneren büyüğe küçükçe sıralanan dağılımlar için de simetrik olasılık eşitlikleri elde edilecektir.

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

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

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

$$2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

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

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

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

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

$$2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

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

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

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

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

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

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

$$s \geq 4 \wedge s = k_1 + k_2 \wedge$$

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

$$f_z S_{j_{ik} j_{sa}}^{DOST} = \left( \sum_{k=l} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(l_{ik}+j_{sa}-l-j_{sa}^{ik}+1)} \sum_{j^{sa}=l_{sa}+n-D} \right.$$

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

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

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

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

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

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

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

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

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

$$\sum_{k_1=0}^{j_{sa}-l-j_{sa}^{ik}+1} \binom{j_{sa}-l-j_{sa}^{ik}+1}{k_1} (j_{ik}=j_{sa}^{ik}+k_1-j_{sa}) j^{sa-D-s}$$

$$\sum_{k_2=0}^{n} \sum_{l_i=n+k_2}^{(n_i-j_s+1)} (n_{is}=n+k_2+j_{sa}^{ik}-j_{ik})$$

$$\sum_{k_1=0}^{j_{sa}-l-j_{sa}^{ik}-k_2} \binom{j_{sa}-l-j_{sa}^{ik}-k_2}{k_1} (n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)$$

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

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

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

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

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

$$D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 2 \leq l \leq D - n + 1 \wedge$$

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

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

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

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

$$D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 2 \leq l \leq D - n + 1 \wedge$$

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

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

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

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

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

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

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

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

$$f_{z=1, \dots, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{ik}-l+1)} \sum_{l_{ik}+n-D}^{l_{sa}-l+1} \sum_{j_{sa}=l_{sa}+n-D}^{l_{sa}-l+1}$$

$$\sum_{i=n+\mathbb{k}}^n \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{j_{ik}-\mathbb{k}_1+1} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}$$

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

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

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

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

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

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



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

$$\left( (D \geq n < n \wedge l_s > D - l + 1 \wedge 2 \leq l \leq D + l_{ik} + j_{sa} - n - l_s - j_{sa}^{ik} + 1 \wedge j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge j_{ik} + j_{sa} - j_{sa}^{ik} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge l_{ik} - j_{sa}^{ik} + 1 = l_s \vee l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik}) \vee (D \geq n < n \wedge l_s > D - l + 1 \wedge 2 \leq l \leq D + l_{ik} + j_{sa} - n - l_s - j_{sa}^{ik} + 1 \wedge j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik}) \right) \wedge D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

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

$$s \geq 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

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

$$f_z^{SDOST} = \left( \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})} j_{sa}^{sa=j_{ik}+j_{sa}-j_{sa}^{ik}} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}^{sa+1}}^{n_{ik}+j_{ik}-j_{sa}^{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa}^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa}^{sa})!} \cdot \frac{(n_{sa} - n_{sa} - 1)!}{(n_{sa} + j_{sa}^{sa} - n - 1)! \cdot (n - j_{sa}^{sa})!} \cdot \frac{(n - l - j_{sa}^{ik})!}{(n - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa}^{sa} - s)!} \right) +$$

$$\left( \sum_{k=l}^{(l_{sa}+n+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{(j_{ik}=l_{ik}+n-D)}^{l_{sa}-l+1} \sum_{j_{sa}=l_{sa}+n-D} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}^{sa+1}}^{n_{ik}+j_{ik}-j_{sa}^{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa}^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa}^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa}^{sa} - n - 1)! \cdot (n - j_{sa}^{sa})!} \right)$$

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

GÜLDÜZMAYA

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!} \cdot \frac{1}{(n-s)!}$$

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

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

$$2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

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

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

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

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

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

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

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

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

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \left( \sum_{k=l} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{l_s+j_{sa}-l}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_{sa}=n-j^{sa}+1}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \right)$$

$$\begin{aligned}
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \\
& \left( \sum_{k=l}^{(j^{sa} + j_{sa}^{ik} - j_{sa} - 1)} \sum_{(j_{ik}=l_s+n+j_{sa}^{ik}-D-1)}^{l_s+j_{sa}-l} \sum_{j^{sa}=l_s+n-D}^{l_s+j_{sa}-l} \right. \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_k-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \\
& \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \\
& \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik}=l_s+n+j_{sa}^{ik}-D-1)}^{l_s+l+1} \sum_{j^{sa}=l_s+j_{sa}-l+1}^{l_{sa}-l+1} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}
\end{aligned}$$

$$\begin{aligned}
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{\substack{j_{ik} = l_s + n + j_{sa}^{ik} - 1 \\ n_i = n + l_k}}^{(l_{sa} - l)} \sum_{\substack{j^{sa} = l_{sa} + n - 1 \\ n_{is} = n + l_k + j_{sa}^{ik} - j_{ik}}}^{(l_{sa} - l)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_{ik} - j_{sa}^{ik} - 1)! \cdot (n_i - n_{is} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{sa} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - j_{sa})! \cdot (n_{is} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) - \\
 & \sum_{k=l}^{( )} \sum_{\substack{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa} \\ n_i = n + l_k}}^{( )} \sum_{\substack{j^{sa} = l_i + n + j_{sa} - D - s \\ n_{is} = n + l_k + j_{sa}^{ik} - j_{ik}}}^{(l_s + j_{sa} - l)} \\
 & \sum_{n_i = n + l_k}^n \sum_{n_{is} = n + l_k + j_{sa}^{ik} - j_{ik}}^{(n_i - j_s + 1)}
 \end{aligned}$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{\binom{()}{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}}$$

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

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

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

$$D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 2 \leq l \leq D - n + 1 \wedge$$

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

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

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

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

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

$$s: \{j_{sa}^{s-1}, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^{s-1}, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + 1 \wedge$$

$$\mathbb{k}_2: 2 \leq \mathbb{k}_2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_Z S_{j_{ik} j_{sa}}^{DOST} = \sum_{k=l} \sum_{\binom{(l_s + j_{sa}^{ik} - l)}{j_{ik} = l_s + n + j_{sa}^{ik} - D - 1}} \sum_{\binom{l_{sa} - l + 1}{j_{sa} = l_{sa} + n - D}} \sum_{\binom{n}{n_i = n + \mathbb{k}}} \sum_{\binom{(n_i - j_{ik} - \mathbb{k}_1 + 1)}{n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1}} \sum_{\binom{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}{n_{sa} = n - j^{sa} + 1}} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

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

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

$$2 \leq l \leq D - l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

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

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

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

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



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

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

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

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

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \left( \sum_{k=l} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})} \sum_{(l_s+j_{sa}^{ik}-l)} j_{sa}^{sa=j_{sa}-j_{sa}^{ik}} \right. \\ \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j_{sa}}^{(n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)} \\ \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\ \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \\ \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \\ \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\ \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \right) + \\ \left( \sum_{k=l} \sum_{(j_{ik}=l_s+n+j_{sa}^{ik}-D-1)} \sum_{(l_{sa}-l+1)} j_{sa}^{sa=l_{sa}+n-D} \right. \\ \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \\ \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\ \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \\ \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot$$

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

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!} \cdot \frac{1}{(n-s)!}$$

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

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

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

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

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

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

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

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

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

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

$$f_z^{S, ST} = \sum_{k=l}^{\binom{()}{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}} \sum_{j_{sa}^{ik}=l_{sa}+n-D}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

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

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

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

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

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

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

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

$$\sum_{n_{ik}=n_i+j_{sa}^s-j_{sa}^{ik}-l_{sa}^{ik}} \sum_{\binom{()}{n_{ik}=n_i+j_{sa}^s-j_{sa}^{ik}-l_{sa}^{ik}}} \sum_{(n_{ik}-j_s+1)}^{(n_{ik}-j_s+1)} (n_{ik}=n_i+j_{sa}^s-j_{sa}^{ik}-l_{sa}^{ik}-j_{ik}-l_{k_2})$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - j_{sa}^{ik} - 2 \cdot l_{k_2})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - j_{sa}^{ik} - 2 \cdot l_{k_2})!} \cdot \frac{1}{(n-s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{sa}^{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot l_i!$$

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

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

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

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

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

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

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

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

$$l_{k_2} = s + k \wedge$$

$$l_{k_2}: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z S_{j_{ik}, j^{sa}}^{DOST} = \sum_{k=l} \sum_{\binom{()}{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}} \sum_{l_{sa}-l+1}^{l_{sa}-l+1} j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}$$

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

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

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

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

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

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

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

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

$$s \geq 4 \wedge s = s + k \wedge$$

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

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

$$\sum_{n=n+l}^n \sum_{(n_{ik}=n+l+k)}^{(n_{ik}-l-k_1+1)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-k_2)}^{(n_{sa}+1)} \frac{(n_{ik}-n_{sa}-1)!}{(j_{ik}-2)! \cdot (n_{ik}-j_{ik}+1)!} \cdot \frac{(n_{ik}-n_{sa}-1)!}{(j_{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j_{sa})!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j_{sa}-n-1)! \cdot (n-j_{sa})!} \cdot \frac{(l_{ik}-l-j_{sa}^{ik})!}{(l_{ik}-j_{ik}-l+1)! \cdot (j_{ik}-j_{sa}^{ik}-1)!} \cdot \frac{(D+j_{sa}-l_{sa}-s)!}{(D+j_{sa}-n-l_{sa})! \cdot (n+j_{sa}-j_{sa}-s)!}$$

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

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

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-k_1}^{( )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-k_2)}^{( )}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!} \cdot \frac{1}{(n-s)!}$$

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

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

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

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

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

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

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

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

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

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

$$f_{j_{ik}, j_{sa}}^{S, ST} = \sum_{k=l}^{(l_{sa} + j_{sa}^{ik} - l - j_{sa} + 1)} \sum_{(j_{ik} = l_{ik} + n - D)} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}} \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

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

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

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

$$\sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - \mathbb{k}_1} \sum_{(n_{is} = n_{ik} + j_{ik} - j_{sa}^{ik} - \mathbb{k}_2)}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!} \cdot \frac{1}{(n - s)!}$$

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

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

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

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

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

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

$$D \geq n < n \wedge l = \mathbb{k} \geq 1 \wedge$$

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

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

$$j_{sa} = s + \mathbb{k} \wedge$$

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

$$f_z S_{j_{ik} j_{sa}}^{DOST} = \sum_{k=l}^{(j_{sa} + j_{sa}^{ik} - j_{sa})} \sum_{(j_{ik} = l_s + n + j_{sa}^{ik} - D - 1)} j^{sa} = l_i + n + j_{sa} - D - s$$



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

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

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

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{lk}-l_{k_1}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{lk}-j_{sa}^{is}-l_{k_2})}^{(n_{ik}-j_s+1)}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!} \cdot \frac{1}{(n-s)!}$$

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

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

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

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

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

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

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

$s: \{j_{sa}^s, l_{k_1}, j_{sa}^{lk}, j_{sa}^{is}, j_{sa}^{ik}\} \wedge$

$s \geq 4 \wedge s \leq s + l_k \wedge$

$l_{k_z}: z = 2, l_{k_2} = l_{k_1} + l_{k_2} \Rightarrow$

$$f_z S_{j_{ik}, j^{sa}}^{DOST} = \sum_{k=l} \sum_{(j_{ik}=l_s+n+j_{sa}^{lk}-D-1)}^{(l_i+n+j_{sa}^{lk}-D-s-1)} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_i+j_{sa}-l-s+1}$$

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

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

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

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

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

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

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

$$fz S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(\quad)} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})}^{(\quad)} \sum_{j_{sa}^{sa+n-D}}^{l_{sa}-l+1}$$

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

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

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

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

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

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

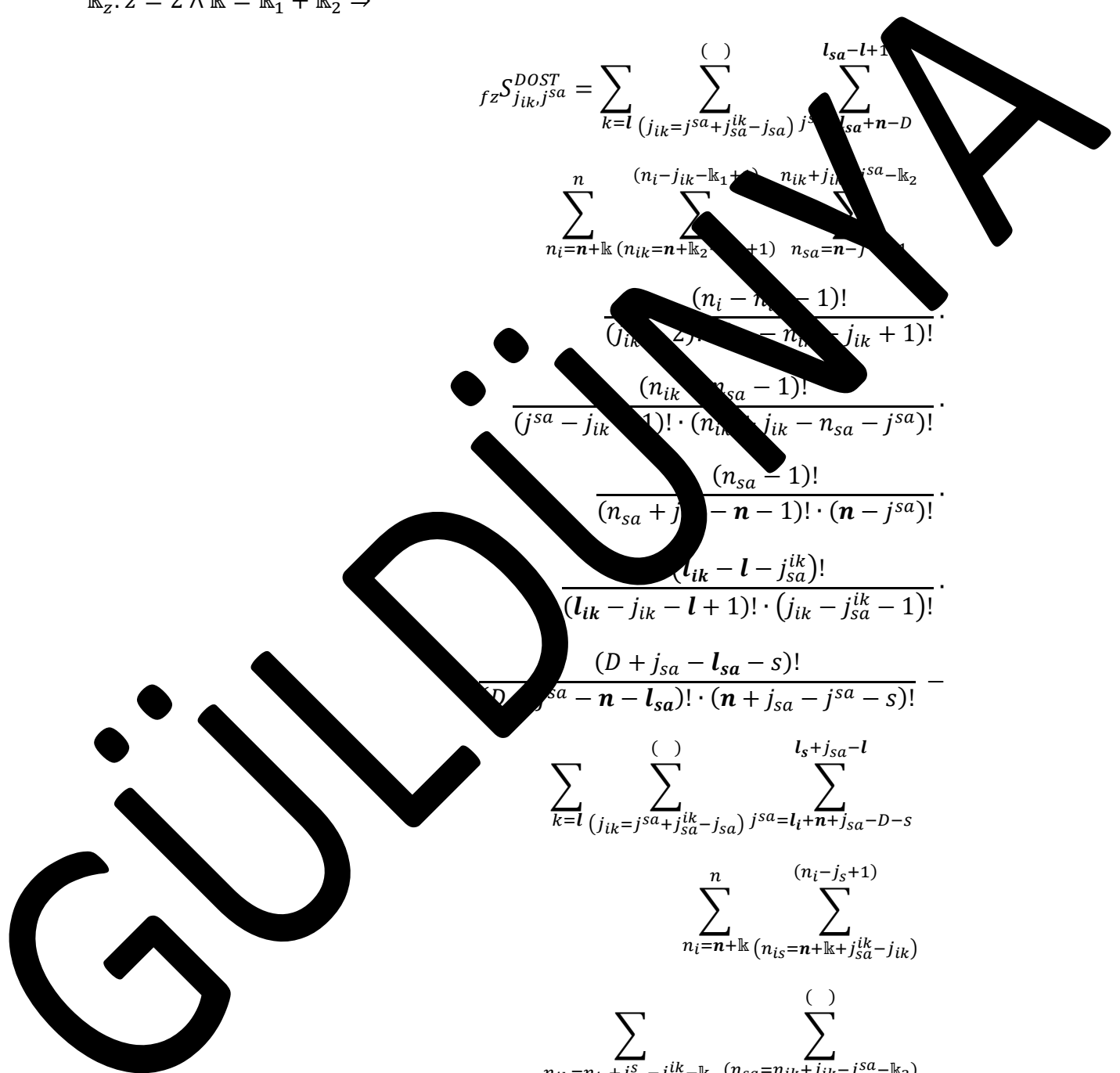
$$\sum_{k=l}^{(\quad)} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})}^{(\quad)} \sum_{j_{sa}^{sa=l_i+n+j_{sa}-D-s}}^{l_s+j_{sa}-l}$$

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

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1}^{(\quad)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(\quad)}$$

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

$$\frac{1}{(n - s)!}$$



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

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

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

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

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

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

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

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

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

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

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

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

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

$$D \geq n < n \wedge l = \mathbb{k} - 1 \wedge$$

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

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

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$$fz_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l} \sum_{(l_{sa} + j_{sa}^{ik} - l - j_{sa} + 1)} \sum_{(j_{ik} = l_{sa} + n + j_{sa}^{ik} - D - j_{sa})} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}} \\ \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_i - j_{ik} - \mathbb{k}_1 + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}$$

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

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

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

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

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

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

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

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

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

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

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

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

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

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

$$fz S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(\quad)} \sum_{j_{sa}^{ik} = j_{sa} + j_{sa}^{ik} - j_{sa}}^{(\quad)} \sum_{j_{sa} = l_{ik}}^{(\quad)} \frac{l_{ik} - l - j_{sa}^{ik} + 1}{D - j_{sa}^{ik}}$$

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

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

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

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

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

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

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

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



$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

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

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

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

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

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

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

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

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

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

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

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

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

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

$$s > n \wedge s = s + \mathbb{k} \wedge$$

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

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l} \sum_{(j_{ik}=l_{ik}+n-D)}^{(l_{ik}-l+1)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

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

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

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

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

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

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

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

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

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

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

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

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

$$s \geq 4 \wedge s = s + k \wedge$$

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

$$f_z S_{j_{sa}}^{DOST} = \sum_{k=l}^{(j_{sa} + j_{sa}^{ik} - j_{sa})} \sum_{(j_{ik} = l_{ik} + n - D)} j_{sa}^{ik} - D - s$$

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

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{\substack{(n_i-j_{ik}-\mathbb{k}_1+1) \\ (n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}} \sum_{\substack{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2 \\ n_{sa}=n-j^{sa}+1}}$$

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

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

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

$$\frac{(l_s - l - j_{sa})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

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

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

$$\sum_{\substack{(j_{sa} - j_{sa} - j_{sa}) \\ (j_{sa} - j_{sa} - j_{sa})}} \sum_{\substack{(j_{sa} - j_{sa} - j_{sa}) \\ (j_{sa} - j_{sa} - j_{sa})}} \sum_{\substack{l_s + j_{sa} - l \\ j^{sa} = l_{sa} + n - D}}$$

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

$$\sum_{\substack{(n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1) \\ (n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}} \sum_{\substack{(j_{sa} - j_{sa} - j_{sa}) \\ (j_{sa} - j_{sa} - j_{sa})}}$$

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

$$\frac{1}{(n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

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

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

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

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

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

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

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

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

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

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

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

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

$$s \geq 4 \wedge s = s + k \wedge$$

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

$$fz S_{j_{ik}}^p = \sum_{k=l}^{(l_i+n+j_{sa}^{ik}-s-1)} \sum_{(j_{ik}=l_{ik}+n-D)}^{l_i+j_{sa}-l-s+1} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{n_{ik}+j_{ik}-j^{sa}-k_2} \sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{sa}+j_{sa}-n-1} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$D \geq n < n \wedge l = \mathbb{k} \geq 1 \wedge$$

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

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

$$s \geq 4 \wedge s = \mathbb{k} + \mathbb{k} \wedge$$

$$\mathbb{k} \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(j^{sa} + j_{sa}^{ik} - j_{sa})} \sum_{(j_{ik} = l_{ik} + n - D)} \sum_{j^{sa} = l_{sa} + n - D}^{l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1}$$

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



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

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

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{lk}-l_{k_1}} \sum_{\binom{()}{n_{sa}=n_{ik}+j_{sa}^{lk}-l_{k_2}}}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{lk} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!}$$

$$\frac{1}{(n-s)!}$$

$$\frac{(l_s + j_{sa}^{lk} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{lk} - 1)!}{(D - l_i)!}$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

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

$$f_z^{\text{DOST}} = \sum_{j_{ik}=l}^{(l+n+j_{sa}^{ik}-D-j_{sa})} \sum_{j_{sa}^{ik}=j_{sa}-1}^{l_{sa}-l+1} \sum_{n_{sa}=n-j_{sa}+1}^{n_{sa}+n-D} \sum_{n_i=n+\mathbb{k}}^n \sum_{n_{ik}=n_{sa}-j_{ik}+1}^{(n_i-j_{ik}-1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - 1)!}{(n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa}^{ik} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} + \sum_{k=l} \sum_{j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa}}^{(l_{ik}-l+1)} \sum_{j_{sa}^{ik}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{l_{sa}-l+1}$$

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

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

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

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

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

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

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

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

$$s \geq 4 \wedge s = s + k \wedge$$

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

$$fz^S_{j_{ik}j_{sa}}^{DOST} = \sum_{k=l}^{\binom{D}{k}} \sum_{j_{ik}=j_{sa}^{ik}-j_{sa}}^{\binom{l_s+j_{sa}-l}{j_{ik}-j_{sa}^{ik}-j_{sa}}} \sum_{l_s+l-j_{sa}-D-1}^{\binom{l_s+j_{sa}-l}{j_{ik}-j_{sa}^{ik}-j_{sa}}} \sum_{n_i=n+k}^n \sum_{n_{ik}=n-k_2-j_{ik}+1}^{\binom{n_i-j_{ik}+1}{n_{ik}=n-k_2-j_{ik}+1}} \sum_{n_{sa}=n-j_{sa}+1}^{\binom{n_{ik}+j_{ik}-j_{sa}-k_2}{n_{sa}=n-j_{sa}+1}} \frac{(n_i - n_{ik} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \sum_{k=l}^{\binom{D}{k}} \sum_{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}^{\binom{l_{sa}-l+1}{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}} \sum_{j_{sa}=l_i+n+j_{sa}-D-s}^{\binom{l_{sa}-l+1}{j_{sa}=l_i+n+j_{sa}-D-s}} \sum_{n_i=n+k}^n \sum_{n_{is}=n+k+j_{sa}^{ik}-j_{ik}}^{\binom{n_i-j_s+1}{n_{is}=n+k+j_{sa}^{ik}-j_{ik}}}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{\binom{(\cdot)}{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}}$$

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

$$\frac{\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - \mathbb{k}_1 - 1)!}}{(D - l)!} \cdot \frac{(n - l)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n_{ik} + j_{sa} - j^{sa} - \mathbb{k}_2)!}$$

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

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

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

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

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

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

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

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

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

$$f_z \mathcal{S}_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l} \sum_{\binom{(l_s + j_{sa}^{ik} - l)}{j_{ik} = l_s + n + j_{sa}^{ik} - D - 1}} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}} \sum_{n_i = n + \mathbb{k}}^n \sum_{\binom{(n_i - j_{ik} - \mathbb{k}_1 + 1)}{n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1}} \sum_{\binom{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}{n_{sa} = n - j^{sa} + 1}} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

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

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

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

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

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

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

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

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

$$s \geq 4 \wedge s = s + k \wedge$$

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

$$f_z S_{j_{ik}, j^{sa}}^{DOST} = \sum_{k=l} \sum_{\binom{(\quad)}{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_i+j_{sa}-l-s+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{\binom{(n_i-j_{ik}-\mathbb{k}_1+1)}{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}} \sum_{n_{sa}=n-j^{sa}+j_{sa}}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - \mathbb{k}_1 + 1)!}$$

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

$$\frac{(n_{sa} - 1)!}{(n_{sa} - j^{sa} - 1)! \cdot (n - j^{sa})!}$$

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

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

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

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

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{\binom{(\quad)}{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}}$$

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

$$\frac{1}{(n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

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

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

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

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

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

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

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

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

$$s \geq 4 \wedge s = s + k \wedge$$

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

$$f_z S_{j_{ik}}^{l_{ik}} = \sum_{k=l}^{j_{sa}^{ik}-l-s} \sum_{(j_{ik}=l_i+n-k-D-s)}^{j_{sa}^{ik}-l-s} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{(n_i-n_{ik}-k-D-s)} \sum_{(n_i-n_{ik}-k_1+1)}^{n_{ik}+j_{ik}-j^{sa}-k_2} \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{n_{sa}=n-j^{sa}+1}$$

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

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

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

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

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

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



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

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

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

$$\frac{1}{(s)!}$$

$$\frac{(l_s - 1)!}{(l_s + j_{ik} - l)! (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + l_i)!}{(D + j_{sa} + s - l + l_i - j_{sa}^{ik} + j_{sa} - s)!}$$

- $((D \geq n < n \wedge l_s > D - n + 1 \wedge$
- $j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$
- $j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$
- $l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$
- $(D \geq n < n \wedge l_s > D - n + 1 \wedge$
- $j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$
- $j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$
- $l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa})) \wedge$
- $D \geq n < n \wedge \mathbb{k} > \mathbb{k} \wedge$
- $j_{sa}^{ik} = j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$
- $s: \{j_{sa}^s, \mathbb{k}_1, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$
- $s \geq 4 \wedge s = s + \mathbb{k} \wedge$
- $\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(j^{sa} + j_{sa}^{ik} - j_{sa})} \sum_{(j_{ik}=l_s + n + j_{sa}^{ik} - D - 1)}^{l_s + j_{sa} - l} j_{sa} = l_{sa} + n - D$$

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

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

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

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-k_1} \sum_{\binom{()}{n_{sa}=n_{ik}+j_{sa}^{ik}-k_2}} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot k_1 - 2 \cdot k_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot k_1 - 2 \cdot k_2)!} \cdot \frac{1}{(n-s)!}$$

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

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

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

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

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

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

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

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

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

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

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

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

$$s \geq 4 \wedge s = s + k \wedge$$

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

$$\begin{aligned}
f_z^{\mathcal{S}_{j_{ik}, j^{sa}}^{DOST}} = & \sum_{k=l}^{(l_{sa}+n+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{(j_{ik}=l_s+n+j_{sa}^{ik}-D-1)} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-l+1} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - l)!}{(j_{ik} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(D + j_{sa}^{ik} - l_{sa} - s)!}{(D + j_{sa}^{ik} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=l}^{(l_s+j_{sa}^{ik}-l)} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{l_{sa}-l+1} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
\end{aligned}$$

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

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

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

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

$$\sum_{(n_{ik}=n+l-j_{sa}^{ik}-k_1-k_2)}^{(n_{ik}-k+1)} \sum_{(n_{ik}=n+l-j_{sa}^{ik}-k_2)}^{(n_{ik}-k+1)}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa} - n_{sa} - j_{sa} - s - j_{sa} - 2 \cdot k_1 - 2 \cdot k_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - 2 \cdot j_{sa} - 2 \cdot k_1 - 2 \cdot k_2)!}$$

$$\frac{1}{(n-s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

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

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

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

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

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

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

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

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

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

$$s \geq 4 \wedge s = s + k \wedge$$

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

$$\begin{aligned}
f_z^{\mathcal{S}_{j_{ik}, j^{sa}}} &= \sum_{k=l}^{(j^{sa} + j_{sa}^{ik} - j_{sa})} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_s + j_{sa} - l} \sum_{j^{sa} = j_{sa} + 1} \\
&\sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j^{sa}}^{n_{ik} + j_{ik} - j^{sa} - k_2} \\
&\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
&\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
&\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
&\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
&\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - l)!}{(j_{ik} + j_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
&\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
&\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{sa} - l + 1} \sum_{j^{sa} = l_s + j_{sa} - l + 1} \\
&\sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - k_2} \\
&\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
&\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
&\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
&\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
\end{aligned}$$

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

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

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

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

$$\sum_{n_{ik}=n_i+j_{sa}-l-k_1-k_2}^{(\quad)} \sum_{j^{sa}=j_{sa}-k_2}^{(\quad)} \binom{(\quad)}{(\quad)}$$

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

$$\frac{1}{(n-s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

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

$$D \geq n < n \wedge l_i = l \wedge l_{sa} = D + j_{sa} - n \wedge$$

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

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

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

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

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

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

$$s \geq 4 \wedge s = s + k \wedge$$

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

$$\begin{aligned}
f_Z S_{j_{ik}, j_{sa}}^{DOST} = & \left( \sum_{k=l} \sum_{(j_{ik}=j_{sa}+j_{sa}^{lk}-j_{sa})} \sum_{j_{sa}=j_{sa}+1}^{l_{ik}+j_{sa}-l-j_{sa}^{lk}+1} \right. \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}}^{n_{ik}+j_{ik}-j_{sa}-l_{k_2}} \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{lk})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{lk} - 1)!} \cdot \\
& \left. \frac{(D + l_{sa} - l_{sa} - 1)!}{(D + l_{sa} - n - l_{sa} - 1)! \cdot (n + j_{sa} - j_{sa} - s)!} \right) + \\
& \left( \sum_{k=l} \sum_{(j_{ik}=j_{sa}^{lk}+1)} \sum_{j_{sa}=j_{sa}+2}^{(j_{sa}+j_{sa}-j_{sa}-1) l_{ik}+j_{sa}-l-j_{sa}^{lk}+1} \right. \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-l_{k_2}} \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{lk})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{lk} - 1)!} \cdot \\
& \left. \frac{(l_{sa} + j_{sa}^{lk} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{lk} - j_{ik} - j_{sa})!} \right)
\end{aligned}$$



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

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

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

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

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

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

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

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

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

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

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

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}}^{( )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}$$

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

$$\frac{1}{(n - s)!}$$

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

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

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

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

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

$$l_{sa} \leq D + j_{sa} - n \wedge$$

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

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

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

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

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

$$f_{zS}^{L_{j_{sa}^{ik}}} = \left( \sum_{k=l}^{()} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{j^{sa}=j_{sa}+1}^{l_s+j_{sa}-l} \right) \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \Big) +$$

$$\begin{aligned}
& \left( \sum_{k=l}^{(j^{sa} + j_{sa}^{ik} - j_{sa} - 1)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)} \sum_{j^{sa} = j_{sa} + 2}^{l_s + j_{sa} - l} \right. \\
& \sum_{n_i = n + l_k}^n \sum_{(n_{ik} = n + l_{k_2} - j_{ik} + 1)}^{(n_i - j_{ik} - l_{k_1} + 1)} \sum_{n_{sa} = n - j^{sa}}^{n_{ik} + j_{ik} - j^{sa} - l_{k_2}} \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - l)!}{(j_{ik} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \\
& \frac{(D + j_{sa}^{ik} - l_{sa} - s)!}{(D + j_{sa}^{ik} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{sa} - l + 1} \sum_{j^{sa} = l_s + j_{sa} - l + 1} \\
& \sum_{n_i = n + l_k}^n \sum_{(n_{ik} = n + l_{k_2} - j_{ik} + 1)}^{(n_i - j_{ik} - l_{k_1} + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - l_{k_2}} \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}
\end{aligned}$$

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

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

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

$$\sum_{n_{ij} = n_{is} + j_{sa}^{ik} - \mathbb{k}_1}^{( )} \sum_{(n_{sa} = n_{is} + j_{sa}^{ik} - \mathbb{k}_2)} j^{sa} - \mathbb{k}_2$$

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

$$\frac{1}{(n - s)!}$$

$$(l_s - l - 1)!$$

$$(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!$$

$$(D - l_i)!$$

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

$$D \geq n < n \wedge l_s = l \wedge l_{sa} = D + j_{sa}^{ik} - n \wedge$$

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

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

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

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

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

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

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

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

$$\begin{aligned}
f_z S_{j_{ik}, j^{sa}}^{DOST} = & \left( \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \right. \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}{(D + j^{sa} - n - l_{sa} - 1)! \cdot (n + j_{sa} - j^{sa} - s)!} \Bigg) + \\
& \left( \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{l_{sa}-l+1} \right. \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \left. \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \right)
\end{aligned}$$

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

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

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

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_2} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-\mathbb{k}_2)}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - j_{sa}^{ik} - 2 \cdot \mathbb{k}_2 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - j_{sa}^{ik} - 2 \cdot \mathbb{k}_2 - 2 \cdot \mathbb{k}_2)!} \cdot \frac{1}{(n-s)!}$$

$$\frac{(n_{is} - l - 1)!}{(n_{is} + j_{sa}^{ik} - j_{sa}^{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{1}{(D + j^{sa} + \dots - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

- $D \geq n < n \wedge l = l \wedge l_s \leq D - n - 1 \wedge$
- $j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - 1 \wedge$
- $j_{ik} + j_{sa} - j_{sa}^{ik} + \dots \leq j^{sa} \leq j_{sa} + j_{sa}^{ik} - s \wedge$
- $l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$
- $l_{sa} \leq D + j_{sa} - n \wedge$
- $D > n \wedge I = \mathbb{k} \geq 0 \wedge$
- $j_{sa} \leq j_{sa}^i \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$
- $s \geq 4 \wedge s = s + \mathbb{k} \wedge$
- $\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$\begin{aligned}
f_z S_{j_{ik}, j_{sa}}^{DOST} = & \left( \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}} \right. \\
& \sum_{n_i = n + l_k}^n \sum_{(n_{ik} = n + l_{k_2} - j_{ik} + 1)}^{(n_i - j_{ik} - l_{k_1} + 1)} \sum_{n_{sa} = n - j_{sa}}^{n_{ik} + j_{ik} - j_{sa} - l_{k_2}} \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \left. \frac{(D + j_{sa} - l_{sa} - 1)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \right) + \\
& \left( \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik} + 1}^{l_{sa} - l + 1} \right. \\
& \sum_{n_i = n + l_k}^n \sum_{(n_{ik} = n + l_{k_2} - j_{ik} + 1)}^{(n_i - j_{ik} - l_{k_1} + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{ik} + j_{ik} - j_{sa} - l_{k_2}} \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \left. \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \right)
\end{aligned}$$

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

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

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

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

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n_{sa} - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!} \cdot \frac{1}{(n - s)!}$$

$$\frac{(j_{sa}^{ik} - l - 1)!}{(j_{sa}^{ik} - j_{sa}^{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{1}{(n - l_i)!}$$

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

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

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

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

$$l_{sa} \leq D + j_{sa} - n \wedge l_{sa} \leq D + s - n \wedge$$

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

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

$$s \in \{j_{sa} - 1, j_{sa}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

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



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

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

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

$$2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

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

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

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

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

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

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

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

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

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

$$fz S_{j_{ik} j_{sa}}^{DOS} = \left( \sum_{k=l} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{j^{sa}=l_{sa}+n-D}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \right) + \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\begin{aligned}
& \left( \sum_{k=l}^{(j^{sa} + j_{sa}^{ik} - j_{sa} - 1)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)} \sum_{j^{sa} = l_{sa} + n - D}^{l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1} \right. \\
& \sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j^{sa}}^{n_{ik} + j_{ik} - j^{sa} - k_2} \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(l_{sa} + j^{sa} - l_{ik} - l)!}{(j_{ik} + j_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=l}^{(l_{ik} - l + 1)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{sa} - l + 1} \sum_{j^{sa} = l_{ik} + j_{sa} - l - j_{sa}^{ik} + 2} \\
& \sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - k_2} \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}
\end{aligned}$$

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

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

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

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

$$\sum_{\binom{()}{n_{ij}=n_{is}+j_{sa}^{ik}-\mathbb{k}_1}} \sum_{\binom{()}{n_{ik}=n_{is}+j_{sa}^{ik}-\mathbb{k}_2}} j^{sa}-\mathbb{k}_2$$

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

$$\frac{1}{(n-s)!}$$

$$(l_s - l - 1)!$$

$$(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!$$

$$(D - l_i)!$$

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

$$D \geq n < n \wedge l = l \wedge l_s = D - n - l \wedge$$

$$D + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 2 \leq l \leq l - 1 \wedge$$

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

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

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

$$n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

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

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

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

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

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

$$f_z S_{j_{ik} j_{sa}^{DOST}} = \sum_{k=1}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_{sa}-l+1} \sum_{j_{sa}=l_{sa}+n-D}^{l_{sa}-l+1}$$

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

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

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

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{( )}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!} \cdot \frac{1}{(n-s)!}$$

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

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

$$2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

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

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

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

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

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

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

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

$$s \geq 4 \wedge s = s + k \wedge$$

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

$$S_{j_{ik}, j_{sa}}^{DOST} = \left( \sum_{k=l} \sum_{\binom{()}{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}} \sum_{\binom{()}{l_s+j_{sa}-l}} \sum_{\binom{()}{j^{sa}=l_{sa}+n-D}} \right)$$

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

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$\sum_{n+l_k}^{(n_i - j_s)} \sum_{(n_{is} + l_k + j_{sa}^{ik} - j_{ik})}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-l_{k_1}} \sum_{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})}$$

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

$$\frac{1}{(n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

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

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

$$D + l_i + j_{sa} - j_{sa}^{ik} + 2 \leq l \leq i - 1 \wedge$$

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

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

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

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

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

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



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

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

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

$$f_z S_{j_{ik} j_{sa}}^{DOST} = \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{sa} - l + 1} \sum_{j_{sa} = l_{sa} + n}^{n} \sum_{n_i = n + \mathbb{k}}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{n_{ik} + j_{sa} - \mathbb{k}_2} \sum_{(n_{sa} = n + \mathbb{k} + j_{sa}^{ik} - j_{ik} + 1)}^{n_{sa} - j_{sa} + 1} \frac{(n_{sa} - n_{ik} - 1)!}{(j_{sa} - 2)! \cdot (n_{sa} - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{sa} - n_{ik} - 1)!}{(j_{sa} - \mathbb{k}_1 - 1)! \cdot (n_{ik} + j_{ik} - j_{sa})!} \cdot \frac{(n_{sa} - n_{ik} - 1)!}{(n_{sa} - n_{sa} - n + 1)! \cdot (n - j_{sa})!} \cdot \frac{(n_{sa} - n_{ik} - 1)!}{(n_{sa} - i - \mathbb{k} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)}^{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}} \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - \mathbb{k}_1} \sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)}^{(\quad)}$$

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

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

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

$$2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

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

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

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

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - j_{sa}^{ik} \wedge$$

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

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

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

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

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

$$f_z^{SDOST} j_{ik} = \left( \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \right)$$

$$\begin{aligned}
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \\
& \left( \sum_{k=l}^{l_{sa}+n+j_{sa}^{ik}-D-j_{sa}-1} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_{sa}-l+1} \sum_{j^{sa}=l_{sa}+n-D}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \right. \\
& \sum_{n_i=n+l_{k_1}}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(D + j_{sa} - l_{sa} - s)!} \cdot \\
& \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \\
& \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})}^{l_{sa}-l+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
& \sum_{n_i=n+l_{k_1}}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}
\end{aligned}$$



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

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

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

$$s \geq 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

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

$$f_z S_{j_{ik} j_{sa}}^{DOST} = \left( \sum_{k=l} \sum_{j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa}-j_{sa}^{ik}} \binom{l_s+j_{sa}^{ik}-l}{j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa}-j_{sa}^{ik}} \binom{l_{sa}-l+1}{j_{sa}=l_{sa}+n-D} \binom{n}{n_i=n+\mathbb{k}_1} \binom{(n_i-j_{ik}-1)}{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)} \binom{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}{n_{sa}=n-j_{sa}+1} \frac{(n_i - n_{ik})!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \frac{(n_{ik} - n_{sa})!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \frac{(n_{sa} - 1)!}{(l_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \right) +$$

$$\left( \sum_{k=l} \sum_{j_{ik}=j_{sa}^{ik}+1} \binom{l_{sa}+n+j_{sa}^{ik}-D-j_{sa}-1}{j_{ik}=j_{sa}^{ik}+1} \binom{l_{sa}-l+1}{j_{sa}=l_{sa}+n-D} \binom{n}{n_i=n+\mathbb{k}_1} \binom{(n_i-j_{ik}-\mathbb{k}_1+1)}{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)} \binom{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}{n_{sa}=n-j_{sa}+1} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \right)$$

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

GÜLDENWA

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{\binom{()}{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}}$$

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

$$\frac{(n - l - 1)!}{(l_s - l - 1)! \cdot (j_{ik} - \mathbb{k}_1 - 1)!} \cdot \frac{(D - l - 1)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n_{sa} + j_{sa} - j^{sa} - \mathbb{k}_2)!}$$

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

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

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

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

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

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - \mathbb{k}_1 \wedge j_{sa}^s \leq j_{sa}^{ik} - \mathbb{k}_2 \wedge$$

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

$$s \geq 4 \wedge s = \mathbb{k}_1 + \mathbb{k}_2 \wedge$$

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

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

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

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

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

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

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

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa}^{ik} \wedge j_{sa}^{ik} \leq n_{sa} \wedge$$

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

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

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge l_i \leq D + s - n \wedge$$

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

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

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



$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$s \geq 4 \wedge s = s + 1 \wedge$$

$$k: z = 2 \wedge k = k_1 + 1 \Rightarrow$$

$$fz^{DOST}_{j_{ik}, j_{sa}} = \sum_{k=l}^{(j^{sa} + j_{sa}^{ik} - j_{sa})} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1} \sum_{j^{sa} = l_i + n + j_{sa} - D - s}^{n_{ik} + j_{sa} - l - j_{sa}^{ik} + 1}$$

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

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

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

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

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

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

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

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

$$\sum_{n_i=n+l_{ik}}^n \sum_{(n_{ik}=n+l_{ik}-j_{ik}+1)}^{(n_i-j_{ik}+1)} \sum_{(n_{sa}=n-j^{sa}+1)}^{n_{ik}+j_{ik}-l_{k2}}$$

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

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

$$\frac{(n_{sa} - 1)!}{(j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

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

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

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

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

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

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k1}} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k2})}^{( )}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!} \cdot \frac{1}{(n-s)!}$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$fz S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_i+n+j_{sa}^{ik}-D-s-1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_i+j_{sa}-l-s+1} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

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

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

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

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{sa})}^{()}$$

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

$$\frac{1}{(-s)!}$$

$$\frac{(l_s - 1)!}{(l_s + j_{ik} - l)! (j_{ik} - j_{sa}^{ik} - 1)!}$$

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

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

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

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

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

$D + j_{sa} - n < l_s \leq D + l_s + j_{sa} - n - 1$

$D \geq n < n = \mathbb{k} \geq 1$

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

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

$s \geq 4 \wedge s = \mathbb{k} \wedge$

$\mathbb{k}_1 = \mathbb{k} \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(j_{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_s+j_{sa}-l} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}$$

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

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

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

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik})}^{(\quad)}$$

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

$$\frac{1}{(s-1)!}$$

$$\frac{(l_s - 1)!}{(l_s + j_{ik} - l)! (j_{ik} - j_{sa}^{ik} - 1)!}$$

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

- $D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1$
- $j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$
- $j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$
- $l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_{sa} + j_{sa} - s = l_{sa} \wedge$
- $D + j_{sa} - n < l_s \leq D + l_s + j_{sa} - n - 1 \wedge$
- $D \geq n < n = \mathbb{k} \geq 1 \wedge$
- $j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa} = j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$
- $s: \{j_{sa}^s, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i, j_{sa}^i\} \wedge$
- $s \geq 4 \wedge s = 1 + \mathbb{k} \wedge$
- $\mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_i+n+j_{sa}^{ik}-D-s-1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_i+j_{sa}-l-s+1} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}$$

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



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

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

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{sa})}^{()}$$

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

$$\frac{1}{(s)!}$$

$$\frac{(l_s - 1)!}{(l_s + j_{ik} - l)!}$$

$$\frac{(l_{ik} - j_{sa}^{ik} - 1)!}{(D - l_i)!}$$

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

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

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

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

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

$l_i \leq D + s - n$

$D \geq n < n = \mathbb{k} \geq 1$

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

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

$s \geq 4 \wedge s = \mathbb{k} + 1$

$\mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

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

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

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

$$\sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}$$

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

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

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

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

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

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



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

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

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

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

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

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

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

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

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

$$s \geq 4 \wedge s = s + k \wedge$$

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

$$j_{ik, j_{sa}}^{OST} = \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-k_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

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

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

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

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

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - j_{sa}^{ik} - 2 \cdot l_{k_2} - 2 \cdot l_{k_2})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - j_{sa}^{ik} - 2 \cdot l_{k_2} - 2 \cdot l_{k_2})!} \cdot \frac{1}{(n-s)!}$$

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

$$D \geq n < n \wedge l \neq l \wedge l_s \leq D - j_{sa} - 1 \wedge$$

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

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

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

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

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

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

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

$$s \geq 4 \wedge s = s + l_k \wedge$$

$$l_{k_2}: z = 2 \wedge l_k = l_{k_1} + l_{k_2} \Rightarrow$$

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

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

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

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

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

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

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

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

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

$$s \geq 4 \wedge s = s + k \wedge$$

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

$$fz_{ik,j_{sa}}^{DOST} = \sum_{k=l}^{(l_{sa} + j_{sa}^{ik} - j_{sa} + 1)} \sum_{(j_{ik} - j_{sa}^{ik} + 1)}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}^{(j_{ik} - j_{sa}^{ik} + 1)}$$

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

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

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

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

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

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

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



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

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

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

$$\frac{1}{(s)!}$$

$$\frac{(l_s - 1)!}{(l_s + j_{ik} - l)! (j_{ik} - j_{sa}^{ik} - 1)!}$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

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

$$\begin{aligned}
f_z S_{j_{ik}, j^{sa}}^{DOST} &= \sum_{k=l} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{j^{sa}=j_{sa}+1}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \\
&\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
&\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
&\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
&\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
&\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
&\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - l)!}{(j_{ik} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
&\frac{(D + j_{sa}^{ik} - l_{sa} - s)!}{(D + j_{sa}^{ik} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
&\sum_{k=l} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(l_{ik}-l+1)} \sum_{j^{sa}=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2}^{l_{sa}-l+1} \\
&\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
&\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
&\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
&\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
&\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
\end{aligned}$$



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

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

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

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

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

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

$$f_z S_{j_{ik} j_{sa}}^{DOST} = \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_{sa}+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{(n_{is}=n+\mathbb{k}_2-j_{ik}+1)}^{(j_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)} \sum_{j_{sa}+1}^{j_{sa}+1} \frac{(n_{ik}-n_{ik}-1)!}{(j_{ik}-2)! \cdot (n_{ik}-j_{ik}+1)!} \cdot \frac{(n_{ik}) (n_{sa}-1)!}{(j_{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j_{sa})!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j_{sa}-n-1)! \cdot (n-j_{sa})!} \cdot \frac{(l_{ik}-l-j_{sa}^{ik})!}{(l_{ik}-j_{ik}-l+1)! \cdot (j_{ik}-j_{sa}^{ik}-1)!} \cdot \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j_{sa}-l_{ik})! \cdot (j_{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot \frac{(D+j_{sa}-l_{sa}-s)!}{(D+j_{sa}-n-l_{sa})! \cdot (n+j_{sa}-j_{sa}-s)!} \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(l_{sa}+1)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

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

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - \mathbb{k}_1 - 1)!} \cdot \frac{(n - l)!}{(D - l)!} \cdot \frac{(D - l)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (j_{sa}^s - j^{sa} - l_i)!}$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$f_z^{S_{j_{ik}, j_{sa}^{DOST}}} = \sum_{k=l}^{(j^{sa} + j_{sa}^{ik} - j_{sa})} \sum_{(j_{ik} = j_{sa}^{ik} + 1)} \sum_{j^{sa} = l_{sa} + n - D}^{l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1}$$

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

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

$$\sum_{n_i=n+l_k}^n \sum_{\binom{()}{n_{is}=n+l_k+j_{sa}^{ik}-j_{sa}^{ik}}}$$

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

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!} \cdot \frac{1}{(n-s)!}$$

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

$$((D \geq n < n \wedge l \neq l_i \wedge l \leq D - n + 1) \vee$$

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

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

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

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

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

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

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

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

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

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

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

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

$$s \geq 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

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

$$fz S_{j_{ik} j_{sa}}^{DOST} = \sum_{k=l}^{(l_{sa}+n+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_{sa}-l+1} \sum_{j_{sa}=l_{sa}+n-1}^{n} \sum_{(n_i=j_{ik}-\mathbb{k}_1+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \sum_{n_{sa}=n-j_{sa}+1}^{n_{sa}-j_{sa}+1} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(n - l - j_{sa}^{ik})!}{(l_{sa} - j_{sa} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} + \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})}^{l_{sa}-l+1} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{n} \sum_{(n_i=j_{ik}-\mathbb{k}_1+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \sum_{n_{sa}=n-j_{sa}+1}^{n_{sa}-j_{sa}+1} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!}$$



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

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

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

$$\sum_{(n_i=j_{sa}^{ik}-l_{sa})} \sum_{(n_i-j_{sa}^{ik})}$$

$$\sum_{(n_{ik}=n_{is}+j_{sa}^{ik}-l_{sa}-l_{k_1})} \sum_{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})}$$

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

$$\frac{1}{(n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

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

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

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

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

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

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

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

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

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

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

$$l_{sa} \leq D + j_{sa} - n \wedge l_i \leq D + s - n)) \wedge$$

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

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

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

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

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

$$f_{z} S_{j_{ik}, j_{sa}}^{DOST} = \sum_{\substack{l_{ik} = j_{sa}^{ik} + 1 \\ (n_{ik} = \mathbb{k}_1 + 1)}}^{(j_{sa}^{ik} - j_{sa}) l_{ik} + j_{sa}^{ik} + 1} \sum_{\substack{j_{sa} = j_{sa} + 1 \\ (n_{sa} = \mathbb{k}_2 - j_{sa} - 1)}}^{(n_{sa} - \mathbb{k}_2 - j_{sa} - 1)} \sum_{\substack{n_i = n + \mathbb{k} \\ (n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}}^{(n_i - \mathbb{k}_1 - j_{ik} - 1)} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{sa} - n_{sa} - 1)!}{(n_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} + \sum_{k=l}^{(l_{ik} - l + 1)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{sa} - l + 1} \sum_{j_{sa} = l_{ik} + j_{sa} - l - j_{sa}^{ik} + 2}^{n_{sa} - l + 1} \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2}$$

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

$$D \geq n < n \wedge l \neq i \wedge l_{sa} \leq D + j_{sa} - n \wedge$$

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

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

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

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

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

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

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

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

$$fz S_{j_{ik} j_{sa}}^{DOST} = \left( \sum_{k=l} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik})} \sum_{(j_{sa}=j_{sa}^{ik}+1)} \frac{l_{ik}+j_{sa}-j_{sa}^{ik}+1}{(j_{ik}-2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_i - j_{ik} - \mathbb{k}_1 + 1)}{(j_{sa} - j_{ik} - 1)!} \cdot \frac{n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2}{(n_{ik} - n_{sa} - 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \right) +$$

$$\left( \sum_{k=l} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{(j_{sa}=j_{sa}^{ik}+2)} \frac{(j_{sa}+j_{sa}^{ik}-j_{sa}-1) l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \frac{(n_i - j_{ik} - \mathbb{k}_1 + 1)}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2}{(n_{ik} - n_{sa} - 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \right)$$

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

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

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

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

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

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_k+j_{ik}+1)}^{(n_{ik}-j^{sa}-l_k+1)} \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}-j^{sa}-l_k+1)}$$

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

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

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

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

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

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

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

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

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$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

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

$$\frac{\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - \mathbb{k}_1 - 1)!}}{(D - 1)! \cdot (n - l)!} \cdot \frac{(n - l)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n_{is} + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_{sa} \leq D + j_{sa} - n \wedge$$

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

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

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

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

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

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

$$s \geq 4 \wedge s = \mathbb{k}_1 + \mathbb{k}_2 \wedge$$

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

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \left( \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \right)$$

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

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$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!} \cdot \frac{1}{(n-s)!}$$

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

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

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

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

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

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

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

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

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

$$l_{sa} - j_{sa} + 1 > l_i \wedge$$

$$l_{sa} \leq D + s - n \wedge l_i \leq D + s - n) \vee$$

$$D \geq n < n \wedge l \neq i \wedge l_s \geq 0 \wedge$$

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

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

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

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

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_{sa}-l+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{l_{sa}-l+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$



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

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

$$2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

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

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

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

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

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

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

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

$$s \geq 4 \wedge s = s + k \wedge$$

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

$$fz S_{j_{ik}, j_{sa}}^{DOST} = \left( \sum_{k=l}^{\binom{D+l+j_{sa}-l-j_{sa}^{ik}}{j_{ik} - j_{sa}^{ik} + j_{sa} - j_{sa}^{ik} + n - D}} \sum_{j_{sa} = l_{sa} + n - D}^{\binom{l_{ik} + j_{sa} - l - j_{sa}^{ik}}{j_{sa} - j_{sa}^{ik} + n - D}} \sum_{n_i = n + k}^{\binom{n_i - j_{ik} - l + 1}{n_{ik} = n + k_2 - j_{ik} + 1}} \sum_{n_{sa} = n - j_{sa} + 1}^{\binom{n_{ik} + j_{ik} - j_{sa} - k_2}{n_{sa} = n - j_{sa} + 1}} \frac{(n_i - n_{ik} - 1)!}{(n_i - j_{ik} - l + 1)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \right) + \left( \sum_{k=l}^{\binom{j_{sa} + j_{sa}^{ik} - j_{sa} - 1}{j_{ik} = j_{sa}^{ik} + 1}} \sum_{j_{sa} = l_{sa} + n - D}^{\binom{l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1}{j_{sa} = l_{sa} + n - D}} \sum_{n_i = n + k}^{\binom{n_i - j_{ik} - k_1 + 1}{n_{ik} = n + k_2 - j_{ik} + 1}} \sum_{n_{sa} = n - j_{sa} + 1}^{\binom{n_{ik} + j_{ik} - j_{sa} - k_2}{n_{sa} = n - j_{sa} + 1}} \right)$$

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

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

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}$$

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

$$\frac{1}{(n-s)!}$$

$$\frac{(l_s - 1)!}{(l_s + j_{ik} - l)!} \frac{(j_{ik} - j_{sa}^{ik} - 1)!}{(D - l_i)!}$$

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

$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1$

$2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa}^{ik} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n - j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_{sa} + j_{sa}^{ik} - j_{sa}^{ik} - l_{ik} \wedge$

$D + j_{sa} - n - l_{sa} \leq D - l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$

$D \geq n < n \wedge l = 1 \geq 0 \wedge$

$j_{sa} \leq j_{sa} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^s, \mathbb{k}_2, j_{sa}^s, \dots, j_{sa}^i\} \wedge$

$s > n - 1 = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k}_z = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_z^{S_{j_{ik}, j_{sa}^{sa}}} = \left( \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})}^{(l_{ik}-l+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \right)$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\begin{aligned}
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa})!}{(D + j^{sa} - n - l_{sa})! \cdot (D + j_{sa} - j_{sa}^{ik})!} + \\
 & \left( \sum_{l=1}^{(l_{ik} + n + j_{sa}^{ik} - D - j_{sa}^{ik})} \sum_{j_{sa}^{ik}=l}^{l_{sa} - l + 1} \sum_{n=D}^{n - D} \frac{(n_i - j_{ik} - l_{sa} - j_{sa}^{ik})!}{(j_{ik} - j_{sa}^{ik} + 1)!} \right) \cdot \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n - j_{ik} + 1)} \sum_{n_{sa}=n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - l_{k_2}} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{k=l} \sum_{(j_{ik}=l_{sa} + n + j_{sa}^{ik} - D - j_{sa})}^{(l_{ik} - l + 1)} \sum_{j^{sa}=j_{ik} + j_{sa} - j_{sa}^{ik} + 1}^{l_{sa} - l + 1}
 \end{aligned}$$

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$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} + 1)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - j_{sa})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} - l_{sa} - j_{sa})!}{(j_{ik} + j_{sa} - j_{sa} - l_{ik})! \cdot (j^{sa} - j_{sa}^{ik} - j_{sa})!} \cdot \\
 & \left( \frac{(D - j_{sa} - l_{sa} - s)!}{(n + j^{sa} - n - l_{sa})! \cdot (n + j^{sa} - j^{sa} - s)!} \right) - \\
 & \sum_{k=l}^{(l_s+j_{sa}-l)} \sum_{(j_{ik}=l+n+j_{sa}^{ik}-D-s)}^{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}}^{(\quad)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{(\quad)} \\
 & \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!}{(n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!} \cdot \\
 & \frac{1}{(n - s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1 \wedge$$

$$D \geq n < n \wedge I = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z = \sum_{j_{ik}=l_{ik}+n-D}^{(l_{ik}-1)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{(j_{sa}^{ik}-1)} \frac{(n_{ik}-k_1+1)!}{(j_{ik}-2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{j_{ik}=l_{ik}+n-D}^{(j_{sa}^{ik}-1)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{(j_{sa}^{ik}-1)}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{\binom{()}{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}$$

$$\frac{\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - \mathbb{k}_1 - 1)!}}{(D - l)!} \cdot \frac{(n - l)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n_{sa} + j_{sa} - j^{sa} - l_i - j_{sa})!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} + j_{sa} - s = l_i \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{sa} - j_{sa} - n + 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{ik} < j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^{s-\mathbb{k}_1}, j_{sa}^{ik-\mathbb{k}_2}, j_{sa}^i, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j^{sa}}^{DOST} = \sum_{k=l} \sum_{\binom{()}{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_i+j_{sa}-l-s+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$



$$\begin{aligned}
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
& \sum_{k=l}^{\binom{D+l-j_{sa}}{l}} \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{\binom{l_s+l-j_{sa}}{l}} j_{sa}^{s-l_{ik}+n+j_{sa}-D-j_{sa}^{ik}} \cdot \\
& \sum_{n_i=n+k}^{\binom{n+l-k}{k}} \sum_{n_{ik}=n+k+j_{sa}^{ik}-j_{ik}}^{\binom{n+l-k}{k}} \cdot \\
& \sum_{n_{ik}=n_{is}+j_{sa}^{ik}-k_1}^{\binom{n+l-k}{k}} \sum_{n_{ik}+j_{ik}-j^{sa}-k_2}^{\binom{n+l-k}{k}} \cdot \\
& \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n - j^{sa} - s - k - 2 \cdot k_1 - 2 \cdot k_2)!}{(2 \cdot n_{is} + 2 \cdot j_{sa}^s - n_{sa} - j^{sa} - n - j_{sa}^{ik} - 2 \cdot k_1 - 2 \cdot k_2)!} \cdot \\
& \frac{1}{(n - s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
\end{aligned}$$

$$D \geq n \wedge n \wedge l \neq i \wedge l \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa}^{ik} + j_{sa}^{ik} \wedge$$

$$j_{ik} \leq j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + j_{sa}^{ik} > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_i + j_{sa}^{ik} - l - s + 1)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = j_{sa} + 1}^{n_{ik} + j_{ik} - j_{sa}}$$

$$\frac{(n_i - 1)!}{(j_{ik} - 2)! (n_i - n_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik})! (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_{ik} + n - D)} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - \mathbb{k}_1} \sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)}^{(\quad)}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!} \cdot \frac{1}{(n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$\sum_{i=0}^{(j^{sa} + j_{sa}^{ik} - j_{sa})} \sum_{j_{ik}=0}^{(i + n - n - D)} \sum_{j_{sa}^{ik}=0}^{(i + n + j_{sa} - D - s)} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\begin{aligned}
& \sum_{k=l} \sum_{(j_{ik}=l_{ik}+n-D)}^{(l_{ik}-l+1)} \sum_{(j_{sa}=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2)}^{l_i+j_{sa}-l-s+1} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{(n_{sa}=n-j_{sa}+j_{sa}^{ik})}^{n_{ik}+j_{ik}-j_{sa}-l_{k_2}} \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} + j_{ik} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{sa} - n_{sa} - j_{sa}^{ik})!} \cdot \\
& \frac{(n_{sa} - j_{sa} - 1)!}{(n_i + j_{sa} - n_{sa} - 1)! \cdot (n - j_{sa}^{ik})!} \cdot \\
& \frac{(l_{ik} - j_{sa}^{ik})!}{(n_i - j_{ik} - l_{k_1} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + j_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - l_{sa} - s)! \cdot (n + j_{sa} - j_{sa} - s)!} \cdot \\
& \sum_{k=l} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})}^{( )} \sum_{(j_{sa}=l_{sa}+n-D)}^{l_s+j_{sa}-l} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-l_{k_2})}^{( )} \\
& \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - s - j_{sa}^{ik} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!} \cdot \\
& \frac{1}{(n - s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
\end{aligned}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$\begin{aligned} & \sum_{k=1}^n \sum_{l=1}^{(l_i+n+j_{sa}^{ik}-s-1)} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_i+j_{sa}-l-s+1} \\ & \sum_{i=n+k}^n \sum_{(n_i-k_1+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-k_2} \\ & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\ & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\ & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\ & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\ & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\ & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \end{aligned}$$

$$\begin{aligned}
 & \sum_{k=l} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(l_{ik}-l+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{l_i+j_{sa}-l-s+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}^{ik}}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} + j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j^{sa} - j_{sa})!} \cdot \\
 & \frac{(n_i + j^{sa} - n - 1)!}{(n_i + j^{sa} - n - 1)! \cdot (n - j^{sa} - 1)!} \cdot \\
 & \frac{(l_{ik} - j_{sa} - 1)!}{(n_i - j_{ik} - l_{k_1} + 1)! \cdot (j_{ik} - j_{sa} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + j_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - l_{sa} - s)! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})}^{(l_s+j_{sa}^{ik}-l)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{()} \\
 & \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!} \cdot \\
 & \frac{1}{(n - s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
 \end{aligned}$$

GÜLDENSA

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\left( (D \geq n < n \wedge l \neq i, l \wedge l_s \leq D - n + 1 \wedge \right.$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l \neq i, l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge l_i \leq D + s - n))$$

$$D \geq n < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\}$$

$$s \geq 4 \wedge s = s + 1$$

$$\mathbb{k}_2 = 2 \wedge \mathbb{k}_1 = \mathbb{k}_1 + 1 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(\quad)} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{j^{sa}=j_{sa}+1}^{l_{sa}-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{(\ )} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})}^{l_s+j_{sa}-l} \sum_{j_{sa}=j_{sa}+1}^{l_s+j_{sa}-l}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}+\mathbb{k}_1-j_{ik})}^{(n_{is}+\mathbb{k}_1+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-\mathbb{k}_1}^{(\ )} \sum_{(n_{ik}-j_{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa} - n_{sa} - j_{sa} - s - j_{sa} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - s - 2 \cdot j_{sa} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!} \cdot \frac{1}{(n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j_{sa} - s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$D \geq n < n \wedge l_i \leq l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} - j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq j_{sa} + j_{sa} - s \wedge$$

$$l_{ik} - j_{ik} + 1 = j_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n - l_i \leq D + l_{sa} + s - n - j_{sa} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_2: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$



$$\begin{aligned}
f_{zS_{j_{ik}, j_{sa}^{DOST}}} &= \sum_{k=l}^{(\quad)} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})}^{(\quad)} \sum_{j_{sa}^{sa}=j_{sa}+1}^{l_{sa}-l+1} \\
&\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_k-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}}^{n_{ik}+j_{ik}-j_{sa}-l_{k_2}} \\
&\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} + j_{ik} + 1)!} \cdot \\
&\frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j_{sa} - 1)!} \cdot \\
&\frac{(n_i - 1)!}{(n_i + j_{sa} - n - 1)! \cdot (n - j_{sa} - 1)!} \cdot \\
&\frac{(l_{ik} - j_{ik} - 1)!}{(n_i - j_{ik} - l_{k_1} + 1)! \cdot (j_{ik} - j_{sa} - 1)!} \cdot \\
&\frac{(D - j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa} - 1)! \cdot (n + j_{sa} - j_{sa} - s)!} \cdot \\
&\sum_{k=l}^{(\quad)} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})}^{(\quad)} \sum_{j_{sa}^{sa}=l_i+n+j_{sa}-D-s}^{l_s+j_{sa}-l} \\
&\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
&\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}}^{(\quad)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-l_{k_2})}^{(\quad)} \\
&\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - s - j_{sa}^{ik} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!} \cdot \\
&\frac{1}{(n - s)!} \cdot \\
&\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
&\frac{(D - l_i)!}{(D + j_{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}
\end{aligned}$$

$$\left( (D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge \right.$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$fz S_{j_{ik} j_{sa}}^{DOS} = \sum_{k=l}^{(l_{sa} + j_{sa}^{ik} - l - j_{sa} + 1)} \sum_{(j_{ik} = l_{sa} + n + j_{sa}^{ik} - D - j_{sa})} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - k_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)} j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n - k + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - k_2} \sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa}^{ik} - k_2)}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - j_{sa}^{ik} - 2 \cdot k_2 - 2 \cdot k_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - j_{sa}^{ik} - 2 \cdot k_2 - 2 \cdot k_2)!}$$

$$\frac{1}{(n - s)!}$$

$$\frac{(j_{sa} - l - 1)!}{(n + j_{sa} - j_{sa}^{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(n - l_i)!}{(D + j^{sa} + n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l \neq l_i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D + j_{sa} - n < l_i \leq D + l_{sa} + s - n - j_{sa}) \vee$$

$$(D \geq n < n \wedge l \neq l_i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(j_{sa} + j_{sa}^{ik} - j_{sa})} \sum_{(j_{ik} = j_{sa} - 1)}^{(j_{sa} - 1)} \sum_{j_{sa} = l}^{(j_{sa} - l)} \sum_{n=D}^{(j_{sa} - l)}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{ik} + j_{ik} - \mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} +$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{sa} - l + 1} \sum_{j_{sa} = l_s + j_{sa} - l + 1}^{l_{sa} - l + 1}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa})!}{(D + j^{sa} - n - l_{sa})! \cdot (D + j_{sa} - j^{sa})!}$$

$$\sum_{j_{ik}=j_{sa}^{ik} - j_{sa}}^{(j_{sa} - l - j_{sa}^{ik} + 1)}$$

$$\sum_{i=n+l_k}^{(n_i - j_s + 1)} \sum_{(n_{is} = n + l_k + j_{sa}^{ik} - j_{ik})}$$

$$\sum_{k=n_{is} + j_{sa}^s - j_{sa}^{ik} - l_{k_1}}^{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - l_{k_2})}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!}$$

$$\frac{1}{(n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$(D > n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D + s - n < l_i \leq D + l_{sa} + s - n - j_{sa}) \vee$$

$$(D \geq n < n \wedge l \neq i l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_{z^s}^{ST} = \sum_{k=l}^{(l_{sa}+n+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_{sa}-l+1} \sum_{j^{sa}=l_{sa}+n-D}^{n_{ik}+j_{ik}-j^{sa}-k_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})}^{(l_s+j_{sa}^{ik}-l)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{l_{sa}-l+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}}^{n_{ik}+j_{ik}-j_{sa}-l_{k_2}}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!}$$

$$\frac{(n_i - 1)!}{(n_i + j_{sa} - n - 1)! \cdot (n - j_{sa})!}$$

$$\frac{(l_{ik} - j_{ik} - 1)!}{(l_{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - 1)!}{(j_{ik} + j_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(l_{ik}-l+1)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-l_{k_2})}^{()}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - s - j_{sa}^{ik} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!}$$

$$\frac{1}{(n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\left( (D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D + s - n < l_i \leq D + l_{sa} + s - n - j_{sa})$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$D - n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$



$$lk_z: z = 2 \wedge lk = lk_1 + lk_2 \Rightarrow$$

$$f_z S_{j_{ik}, j^{sa}}^{DOST} = \sum_{k=l}^{(j^{sa} + j_{sa}^{ik} - j_{sa})} \sum_{(j_{ik} = l_{ik} + n - D)} \sum_{j^{sa} = l_{sa} + n - D}^{l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1}$$

$$\sum_{n_i = n + lk}^n \sum_{(n_{ik} = n + lk_2 - j_{ik} + 1)}^{(n_i - j_{ik} - lk_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - lk_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - n_{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l}^{(l_{ik} - l + 1)} \sum_{(j_{ik} = l_{ik} + n - D)} \sum_{j^{sa} = l_{ik} + j_{sa} - l - j_{sa}^{ik} + 2}^{l_{sa} - l + 1}$$

$$\sum_{n_i = n + lk}^n \sum_{(n_{ik} = n + lk_2 - j_{ik} + 1)}^{(n_i - j_{ik} - lk_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - lk_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

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$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{( )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_s+j_{sa}-l}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_i+l_k-j_{ik})}^{(n_i+l_k+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-l_k}^{( )} \sum_{(n_{ik}-j^{sa}-l_k)}^{( )}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^{ik} - n_{sa} - j^{sa} - s - j_{sa} - 2 \cdot l_{k1} - 2 \cdot l_{k2})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^{ik} - n_{sa} - j^{sa} - s - 2 \cdot j_{sa} - 2 \cdot l_{k1} - 2 \cdot l_{k2})!}$$

$$\frac{1}{(n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j_{sa}^{ik} - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$(D \geq n < n \wedge l \neq l_i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_{ik} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - l_i \leq l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq l_i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D + s - n < l_i \leq D + l_{sa} + s - n - j_{sa}) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_i \wedge l_i + j_{sa} - j_{sa}^{ik} > l_{sa}$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa} \leq j^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^{ik}\} \wedge$$

$$s \geq 4 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$D_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{sa}+n+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{(j_{ik}=l_{ik}+n-D)} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-l+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_i=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-k_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-s)}^{(l_{ik}-l+1)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_{ik}-l+1)}$$

$$\sum_{n_i=n+l_{ik}}^n \sum_{(n_i-j_{ik}-l_{ik}+1)}^{(n_i-j_{ik}-l_{ik}+1)} \sum_{(n_{ik}+j_{ik}-l_{k2})}^{(n_{ik}+j_{ik}-l_{k2})}$$

$$\frac{(n_i - n_{ik} - j_{ik} - 1)!}{(n_i - n_{ik} - j_{ik} - 1)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_s+j_{sa}^{ik}-l)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(l_s+j_{sa}^{ik}-l)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_s+j_{sa}^{ik}-l)}$$

$$\sum_{n_i=n+l_{ik}}^n \sum_{(n_{is}=n+l_{ik}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k1}} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k2})}^{( )}$$

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$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!} \cdot \frac{1}{(n-s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - l)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1) \wedge$$

$$D + s - n < l_i \leq D + l_{sa} - n - j_{sa} - 1) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa}^{ik} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$s \geq 4 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l} \sum_{\binom{()}{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}} \sum_{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{j_{sa}=l_{ik}+n+j_{sa}-D-j_{ik}}$$

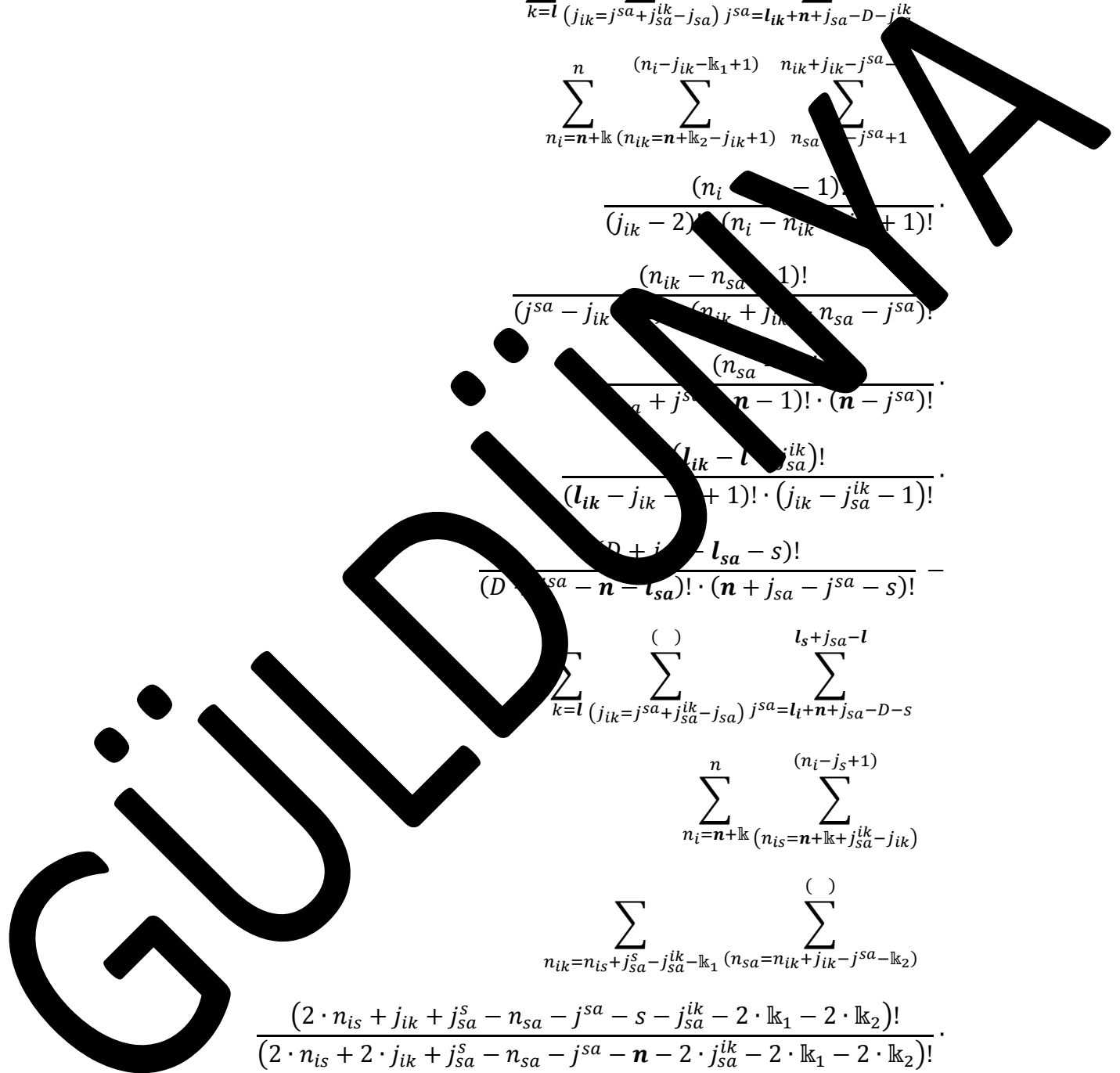
$$\sum_{n_i=n+\mathbb{k}}^n \sum_{\binom{(n_i-j_{ik}-\mathbb{k}_1+1)}{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}} \sum_{n_{sa}=n_i+j_{ik}-j_{sa}-j_{sa}^{ik}+1} \frac{(n_i-1)!}{(j_{ik}-2)! \cdot (n_i-n_{ik}+1)!} \cdot \frac{(n_{ik}-n_{sa}-1)!}{(j_{sa}-j_{ik})! \cdot (n_{ik}+j_{ik}-n_{sa}-j_{sa})!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j_{sa}-n-1)! \cdot (n-j_{sa})!} \cdot \frac{(l_{ik}-l-j_{sa}^{ik})!}{(l_{ik}-j_{ik}-1)! \cdot (j_{ik}-j_{sa}^{ik}-1)!} \cdot \frac{(D+j_{sa}-l_{sa}-s)!}{(D+j_{sa}-n-l_{sa})! \cdot (n+j_{sa}-j_{sa}-s)!}$$

$$\sum_{k=l} \sum_{\binom{()}{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}} \sum_{l_s+j_{sa}-l} \sum_{j_{sa}=l_i+n+j_{sa}-D-s}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{\binom{(n_i-j_s+1)}{n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik}}}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{\binom{()}{n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!} \cdot \frac{1}{(n-s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$



$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l = l \wedge l_{sa} \leq D + j_{sa} - n \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOS} = \left( \sum_{k=l}^{(\cdot)} \sum_{l(j_{ik}=j_{sa}^{ik})}^{(\cdot)} \sum_{j_{sa}=j_{sa}} \right)$$

$$\sum_{n_i=n+k}^{(n_i-j_{ik}-k_1+1)} \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{n_{ik}+j_{ik}-j_{sa}-k_2} \sum_{n_{sa}=n-j_{sa}+1}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!} \right) +$$

$$\left( \sum_{k=l}^{(\cdot)} \sum_{l(j_{ik}=j_{sa}^{ik})}^{(\cdot)} \sum_{j_{sa}=j_{sa}+1}^{l_{sa}-l+1} \right)$$

$$\sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-k_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (n_{sa} - j_{sa})!} \cdot \frac{\binom{D + j_{sa} - l_{sa}}{(D + j^{sa} - n - l_{sa})! \cdot (n_{sa} + j_{sa} - j^{sa})!}}{\sum_{k=1}^n \sum_{j_{sa}=j_{sa}}^{(\cdot)} \sum_{n_{ik}=n_i - j_{ik} + \mathbb{k}_1}^n \sum_{n_{sa}=n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}^{(\cdot)}} \cdot \frac{(2 \cdot n_{sa} - j_{sa} - j_{sa} - j_{sa} - j^{sa} - s)!}{(n_i - n_{sa} - j_{sa} - n - 2 \cdot \mathbb{k}_2 + j_{sa})! \cdot (n - s)!} \cdot \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l = l_i \wedge l_i \leq D - n + 1$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa}$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + j_{sa} \geq l_s \wedge l_{sa} \wedge j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$l_{ik} + j_{sa}^{ik} - n \wedge l_i \leq D + s - n \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$



$$\begin{aligned}
fz^{S_{j_{ik}, j_{sa}^{DO}}ST} &= \sum_{k=i}^n \sum_{l}^{( )} (j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}) \sum_{j_{sa}=j_{sa}}^{l_{sa}-i^{l+1}} \\
&\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}}^{n_{ik}+j_{ik}-j_{sa}-l_{k_2}} \\
&\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} + j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} + j_{sa})!} \cdot \frac{(n - 1)!}{(n - l_{k_1} - j_{sa} - n_{sa})! \cdot (n - j_{sa})!} \\
&\frac{(n - i - l_{k_1} - j_{ik})!}{(l_{ik} - j_{ik} - i - l_{k_1} - 1)! \cdot (j_{ik} - j_{sa} - 1)!} \cdot \frac{(D + n_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa} - s)! \cdot (n + j_{sa} - j_{sa} - s)!} \\
&\sum_{k=i}^n \sum_{l}^{( )} (j_{ik}=j_{sa}^{ik}) \sum_{j_{sa}=j_{sa}} \\
&\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n_i-j_{ik}-l_{k_1}+1)}^{( )} \sum_{n_{sa}=n_{ik}+j_{ik}-j_{sa}-l_{k_2}} \\
&\frac{(2 \cdot n_i + n_{sa} - n_{sa} - j_{ik} - j_{sa} - s - 2 \cdot l_{k_1} - 2 \cdot l_{k_2} + j_{sa}^s)!}{(2 \cdot n_i + n_{sa} - j_{sa} - n - 2 \cdot l_{k_1} - 2 \cdot l_{k_2} + j_{sa}^s)! \cdot (n - s)!} \\
&\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}
\end{aligned}$$

$$D \geq n < n \wedge l = i^l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} + j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D \geq n < n \wedge l = l_k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik} j_{sa}}^{DOST} = \sum_{k=1}^n \sum_{i \mid (j_{ik} = j_{sa} + j_{sa}^{ik} - j_{sa})} \sum_{j_{sa} = j_{sa}}^{l_{sa} - i^{l+1}}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + \dots)} \sum_{n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2}^{n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2}$$

$$\frac{(n_{sa} - n_{ik} - 1)!}{(j_{sa} - 2)! \cdot (n_{sa} - n_{ik} - j_{ik} + \dots)}$$

$$\frac{(j_{sa} - 1)! \cdot (n_{ik} + j_{ik} - j_{sa})!}{(n_{sa} - n_{sa} - n - 1)! \cdot (n - j_{sa})!}$$

$$\frac{(l_i - i^{l - j_{sa}^{ik}})!}{(l_{ik} - i^{l+1})! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!}$$

$$\sum_{k=1}^n \sum_{i \mid (j_{ik} = j_{sa}^{ik})} \sum_{j_{sa} = j_{sa}}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2}$$

$$\frac{(2 \cdot n_i + j_{sa}^{ik} - n_{sa} - j_{ik} - j_{sa} - s - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2 + j_{sa}^s)!}{(2 \cdot n_i - n_{sa} - j_{sa} - n - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2 + j_{sa}^s)! \cdot (n - s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l = i^l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z S_{j_{ik} j_{sa}}^{DOST} = \sum_{k=i}^n \sum_{l(j_{ik}=j_{sa}+j_{sa}^{ik})}^{( )} \frac{l_{ik}+j_{sa}-j_{sa}^{ik}+1}{j_{sa}^{ik}} \cdot \frac{(n_i - j_{ik} - k_1 + 1) \cdot (n_{sa} + j_{ik} - j_{sa} - k_2)}{n_i + k_1 (n_{ik} = n_i - j_{ik} + 1) \cdot (n_{sa} + 1)} \cdot \frac{(n_{ik} - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa}^{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa}^{ik})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - i l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!} \cdot \sum_{k=i}^n \sum_{l(j_{ik}=j_{sa}^{ik})}^{( )} \sum_{j_{sa}=j_{sa}} \sum_{n_i=n+k}^n \sum_{(n_{ik}=n_i-j_{ik}-k_1+1)}^{( )} \sum_{n_{sa}=n_{ik}+j_{ik}-j_{sa}-k_2} \frac{(2 \cdot n_i + j_{sa}^{ik} - n_{sa} - j_{ik} - j_{sa} - s - 2 \cdot k_1 - 2 \cdot k_2 + j_{sa}^s)!}{(2 \cdot n_i - n_{sa} - j_{sa} - n - 2 \cdot k_1 - 2 \cdot k_2 + j_{sa}^s)! \cdot (n - s)!} \cdot \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l = {}_i l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

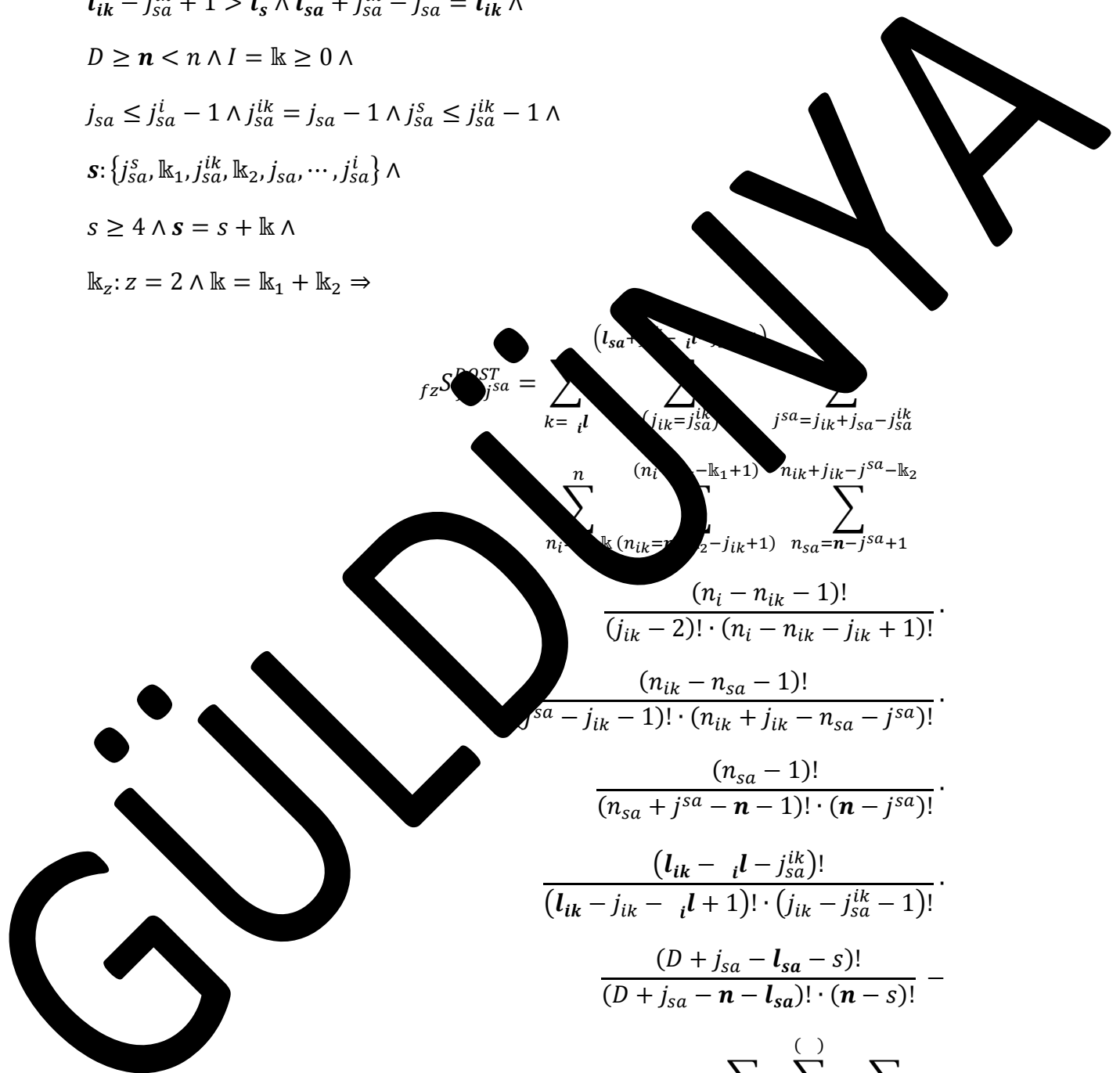
$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z^{S_{POST} j_{sa}} = \sum_{k=i}^n \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{(l_{sa}+j_{sa}^{ik}-i^l)} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{(n_i=n-\mathbb{k}_1+1)} \sum_{(n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)} \sum_{(n_{sa}=n-j_{sa}+1)} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - i^l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i^l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!}$$

$$\sum_{k=i}^n \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j_{sa}=j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}$$



$$\frac{(2 \cdot n_i + j_{sa}^{ik} - n_{sa} - j_{ik} - j^{sa} - s - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2 + j_{sa}^s)!}{(2 \cdot n_i - n_{sa} - j^{sa} - n - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2 + j_{sa}^s)! \cdot (n - s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l = {}_i l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\sum_{k=0}^{n-i-l+1} \sum_{j_{ik}=j_{sa}^{ik}} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - {}_i l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - {}_i l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!}$$

$$\sum_{k=i}^{\binom{()}{l}} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=n+l}^n \sum_{(n_{ik}=n_i-j_{ik}-l_{k_1}+1)}^{\binom{()}{n_{sa}=n_{ik}+j_{ik}-j^{sa}}}$$

$$\frac{(2 \cdot n_i + j_{sa}^{ik} - n_{sa} - j_{ik} - j^{sa} - s - 2 \cdot l_{k_1} - 2 \cdot l_{k_2} + j_{sa}^{ik})!}{(2 \cdot n_i - n_{sa} - j^{sa} - n - 2 \cdot l_{k_1} - 2 \cdot l_{k_2} + j_{sa}^s) \cdot (n - s)!}$$

$$\frac{(D - l_i)}{(D + s - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l = i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge l_i \leq D + s - n \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, l_{k_1}, j_{sa}^{ik}, l_{k_2}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + l_{k_1} \wedge$$

$$l_{k_2}: z = 2 \wedge l_{k_2} = l_{k_1} + l_{k_2}$$

$$f_z S_{j_{ik}, j^{sa}}^{DOST} = \sum_{k=i}^{\binom{()}{l}} \sum_{(j_{ik}=j_{sa}^{ik})}^{\binom{()}{l_{sa}+j_{sa}^{ik}-l-j_{sa}+1}} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \sum_{n_i=n+l}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{\binom{()}{n_{ik}+j_{ik}-j^{sa}-l_{k_2}}} \sum_{n_{sa}=n-j^{sa}+1} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - i^l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i^l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!}$$

$$\sum_{k_1} \sum_{\substack{(\cdot) \\ (j_{ik} = j_{sa}^{ik}) \\ j_{sa} = j_{sa}}} \sum_{j_{sa}}$$

$$\sum_{n_i = n + k}^n \sum_{\substack{(\cdot) \\ (n_{ik} = \dots, k_1 + 1) \\ n_{sa} = \dots + j_{ik} - j_{sa} - k_2}}$$

$$\frac{(2 \cdot n_i + j_{sa}^{ik} - n_{sa} - j_{sa} - j_{sa} - 2 \cdot k_1 - 2 \cdot k_2 + j_{sa})!}{(2 \cdot n_i - n_{sa} - j_{sa} - n - 2 \cdot k_1 - 2 \cdot k_2 + j_{sa})! \cdot (n - s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$((D \geq n < n \wedge l = i^l \wedge l_s = n - n) \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa} + j_{sa}^{ik} > l_s \wedge l_s + j_{sa}^{ik} - j_{sa} > l_{sa} \wedge$$

$$l_i \leq D + s - n)$$

$$(D \geq n < n \wedge l = i^l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + j_{sa}^{ik} > l_s \wedge$$

$$(j_{sa} - n \wedge l_i \leq D + s - n)) \wedge$$

$$D \geq n < n \wedge I = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik} j^{sa}}^{DOST} = \sum_{k=i}^l \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j^{sa}} \frac{\binom{l_{ik}-i^{l+1}}{l_{sa}-i^{l+1}}}{(j_{ik}-2)! \cdot (n_i - n_{ik} - j_{sa}^{ik} + 1)!} \cdot \frac{(n_i - j_{ik} - \mathbb{k}_1 + 1) \cdot n_{ik} + j_{ik} - j^{sa} - 1}{(n_{sa} - n_{ik} - j_{sa}^{ik} + 1) \cdot (n - j^{sa})!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - n_{sa} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} - 1)! \cdot (n - j^{sa})!} \cdot \frac{(n - i^l - j_{sa}^{ik})!}{(j_{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=i}^l \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j^{sa}} \frac{\binom{()}{n_i=n+\mathbb{k}} \binom{()}{n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1} \binom{()}{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}}{(2 \cdot n_i + j_{sa}^{ik} - n_{sa} - j_{ik} - j^{sa} - s - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2 + j_{sa}^s)!} \cdot \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l = i^l \wedge l_{sa} \leq D + j_{sa} - n \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$



$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge I = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \left( \sum_{k=i}^l \binom{l_{ik} + j_{sa} - k + 1}{j_{sa} = j_{sa}} \sum_{j_{sa} = j_{sa}}^{(j_{sa} + j_{sa}^{ik} - j_{sa})} \sum_{j_{sa} = j_{sa} + 1}^{(n_i - k_1 + 1)} \sum_{j_{sa} = j_{sa} - k_2}^{(n_i - k_2 - j_{sa} + 1)} \sum_{n_i = n + k}^{(n_i - n_{ik} - 1)} \sum_{n_{ik} = n + k_2 - j_{sa} + 1}^{(n_{ik} + j_{ik} - n_{sa} - j^{sa})} \sum_{n_{sa} = n - j^{sa} + 1}^{(n_{sa} - 1)} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j_{ik} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - i - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!} \right) + \left( \sum_{k=i}^l \binom{(j_{sa} + j_{sa}^{ik} - j_{sa} - 1) l_{ik} + j_{sa} - i - j_{sa}^{ik} + 1}{(j_{ik} = j_{sa}^{ik})} \sum_{j_{sa} = j_{sa} + 1}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{ik} = n + k_2 - j_{sa} + 1}^{(n_{ik} + j_{ik} - j_{sa} - k_2)} \sum_{n_{sa} = n - j^{sa} + 1}^{(n_i - n_{ik} - 1)} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \right)$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_{ik} - i^l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i^l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{i^l+1} \sum_{j_{sa}=l_{ik}+j_{sa}^{ik}+2}^{i^l+1}$$

$$\sum_{n=n+l_{ik}}^n \sum_{n_{ik}=n-j_{ik}+1}^{n-j_{ik}-l_{ik}+1} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{ik}+1}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j_{ik} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_{ik} - i^l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i^l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \Bigg) -$$

$$\sum_{k=i^l}^{( )} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{sa}}$$

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$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{\binom{()}{n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1}} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(2 \cdot n_i + j_{sa}^{ik} - n_{sa} - j_{ik} - j^{sa} - s - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2 + j_{sa}^s)!}{(2 \cdot n_i - n_{sa} - j^{sa} - \mathbf{n} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2 + j_{sa}^s)! \cdot (\mathbf{n} - s)!}$$

$$\frac{(D - l_i)!}{(D + s - \mathbf{n} - l_i)! \cdot (\mathbf{n} - s)!}$$

$$D \geq \mathbf{n} < \mathbf{n} \wedge l = {}_i l \wedge l_{sa} \leq D + j_{sa} - \mathbf{n} \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq \mathbf{n} < \mathbf{n} \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2$$

$$S_{z, D}^{D, j_{sa}} = \left( \sum_{k={}_i l}^{(l_{ik} - {}_i l + 1)} \sum_{(j_{ik} = j_{sa}^{ik})} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{\binom{()}{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!}$$

$$\frac{(l_{ik} - {}_i l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - {}_i l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\begin{aligned}
 & \left( \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!} \right) + \\
 & \left( \sum_{k=i}^l \sum_{(j_{ik}=j_{sa}^{ik})}^{(l_{ik}-i^{l+1})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{l_{sa}-i^{l+1}} \right. \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_k-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-1}^{n_{ik}+j_{ik}-j^{sa}-1} \\
 & \frac{(n_i - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik})! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - i^{l+1} - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i^{l+1} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{ik} + i^{l+1} - l_{ik} - j_{sa})!}{(j_{ik} + l_{k_1} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) - \\
 & \sum_{k=i}^l \sum_{(j_{ik}=j_{sa}^{ik})}^{(\quad)} \sum_{j^{sa}=j_{sa}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n_i-j_{ik}-l_{k_1}+1)}^{(\quad)} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(2 \cdot n_i + j_{sa}^{ik} - n_{sa} - j_{ik} - j^{sa} - s - 2 \cdot l_{k_1} - 2 \cdot l_{k_2} + j_{sa}^s)!}{(2 \cdot n_i - n_{sa} - j^{sa} - n - 2 \cdot l_{k_1} - 2 \cdot l_{k_2} + j_{sa}^s)! \cdot (n - s)!} \\
 & \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}
 \end{aligned}$$

$D \geq n < n \wedge l = i \wedge l_s \leq D - n + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z = \sum_{k=1}^n \sum_{j_{sa}^{ik}=j_{sa}}^{( )} \sum_{j_{sa}=j_{sa}}^{( )}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_2+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(n_i - n_{ik} - j_{ik} + 1)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa}^{ik} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!}$$

$$\sum_{k=1}^n \sum_{j_{sa}^{ik}=j_{sa}}^{( )} \sum_{j_{sa}=j_{sa}}^{( )}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{( )} \sum_{n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}^{( )}$$

$$\frac{(2 \cdot n_i + j_{sa}^{ik} - n_{sa} - j_{ik} - j_{sa} - s - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2 + j_{sa}^s)!}{(2 \cdot n_i - n_{sa} - j_{sa} - n - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2 + j_{sa}^s)! \cdot (n - s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$\left( (D \geq n < n \wedge l = {}_i l \wedge l_s \leq D - n + 1 \wedge \right.$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - n \wedge l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l = {}_i l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - l_{sa} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l = {}_i l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - l_{sa} \wedge$$

$$l_i \leq D + s - n) \wedge$$

$$D \geq n < n \wedge l = {}_i l \wedge l_s = 0 \wedge$$

$$j_{sa}^{ik} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{ \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i, \dots, j_{sa}^i \}$$

$$\geq 4 \wedge l_s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k}_z = \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k= {}_i l} \sum_{\binom{()}{j_{ik}=j_{sa}^{ik}}} \sum_{l_{sa} - i^{l+1}} \sum_{j_{sa}=j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{\binom{(n_i-j_{ik}-\mathbb{k}_1+1)}{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}} \sum_{\binom{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}{n_{sa}=n-j_{sa}+1}}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot$$

$$\sum_{k=0}^{n} \sum_{(j_{ik}=j_{sa}^{ik})} j^{sa}$$

$$\sum_{n_i=n+k}^n \sum_{(n_i-j_{ik}-l_{sa}+1) n_{sa}=n_{ik}+j_{ik}} j^{sa-k_2}$$

$$\frac{(2 \cdot n_i + j_{sa}^{ik} - l_{sa} - j_{ik} - j^{sa} - s - 2 \cdot k_1 - 2 \cdot k_2 + j_{sa}^s)!}{(2 \cdot n_i - n_{sa} - j_{sa}^{ik} - n - 2 \cdot k_1 - 2 \cdot k_2 + j_{sa}^s)! \cdot (n - s)!} \cdot$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

- $((D \geq n < n \wedge l_s > D - n + 1 \wedge$
- $2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$
- $j_{sa}^{ik} + 1 \leq j_{ik} + j^{sa} + j_{sa} - j_{sa} - 1 \wedge$
- $j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$
- $(l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik}) \vee$
- $(D \geq n < n \wedge l_s > D - n + 1 \wedge$
- $2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$
- $j_{sa}^{ik} + 1 \leq j_{ik} + j^{sa} + j_{sa} - j_{sa} - 1 \wedge$
- $j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$
- $(l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik})) \wedge$
- $D \geq n < n \wedge l = k > 0 \wedge$
- $j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik} j_{sa}}^{DOST} = \left( \sum_{k=l} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(j_{sa}=l_{sa}+n-D)}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \right. \\ \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \\ \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\ \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \\ \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \\ \left. \frac{(j_{sa} - l - j_{sa}^{ik})!}{(n_{sa} + j_{sa} - n - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \right) + \\ \left( \sum_{k=l} \sum_{(j_{ik}=l_{ik}+n-D)}^{(j_{sa}+j_{sa}^{ik}-j_{sa}-1)} \sum_{(j_{sa}=l_{sa}+n-D)}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \right. \\ \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \\ \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\ \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \\ \left. \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \right)$$



$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_{ik}+n-D)}^{l_{sa}+1} \sum_{(j_{sa}=j_{sa}^{ik}+2)}^{l_{sa}+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_k-j_{ik}+1)}^{(n_i-j_{ik}+1)} \sum_{(n_{sa}=n-j_{sa}+1)}^{n_{ik}+j_{ik}-l_{k2}}$$

$$\frac{(n_{ik}-j_{ik}-l_{k1})!}{(j_{ik}-l_{k1}-2)! \cdot (n_{ik}-n_{ik}-j_{ik}-l_{k1}+1)!}$$

$$\frac{(n_{sa}-j_{sa}-1)!}{(j_{sa}-j_{sa}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j_{sa})!}$$

$$\frac{(n_{sa}-1)!}{(j_{sa}-n-1)! \cdot (n-j_{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{( )} \sum_{(j_{ik}=j_{sa}^{ik}+j_{sa}^{ik}-j_{sa})}^{( )} \sum_{j_{sa}=l_i+n+j_{sa}-D-s}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}-l_{k1}}^{( )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-l_{k2})}^{( )}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!} \cdot \frac{1}{(n-s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - l)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 2 \leq l \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 2 \leq l \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik}) \wedge$$

$$D \geq n < n \wedge l_s > 0 \wedge$$

$$j_{sa} \leq j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa} < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i, \dots, j_{sa}^i\} \wedge$$

$$s \geq s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_{ik}+n-D)}^{l_{sa}-l+1} \sum_{j^{sa}=l_{sa}+n-D}^{n} \sum_{(n_i=j_{ik}-\mathbb{k}_1+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{n_{sa}=n-j^{sa}+1}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa} - n_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa}^{ik})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - l_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - 1)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \sum_{k=l}^{(\cdot)} \sum_{(j_{ik}=j_{sa}^{ik}-j_{sa})}^{(\cdot)} \sum_{l_{ik}+j_{sa}^{ik}+1}^{(\cdot)} \sum_{n_i=n+l}^{(\cdot)} \sum_{(n_{is}=n+l+j_{sa}^{ik}-j_{ik})}^{(\cdot)} \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1}^{(\cdot)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\cdot)} \frac{(2 \cdot n_{ik} + j_{ik} + n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!} \cdot \frac{1}{(n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

- $((D \geq n < n \wedge l_s > D - n + 1 \wedge$
- $2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$
- $j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik})) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\sum_{z=2}^{\mathbb{k}} \sum_{j_{ik}, j_{sa}}^{D+s} \binom{l_{ik}-l}{j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa}} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \sum_{n_i=n+\mathbb{k}}^n \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \Bigg) + \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\begin{aligned}
& \left( \sum_{k=l}^{l_{sa}+n+j_{sa}^{ik}-D-j_{sa}-1} \sum_{(j_{ik}=l_{ik}+n-D)}^{l_{sa}-l+1} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-l+1} \right. \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
& \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - 1)!}{(j_{ik} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \\
& \frac{(D + j_{sa}^{ik} - l_{sa} - s)!}{(D + j_{sa}^{ik} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})}^{(l_{ik}-l+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{l_{sa}-l+1} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
& \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}
\end{aligned}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)} j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}$$

$$\sum_{n=n+l_k}^n \sum_{(n_{is}=n+l_k-j_{ik})}^{(n_{is}+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-k_1-n_{ik}}^{( )} \sum_{(j^{sa}-k_2)}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot k_1 - 2 \cdot k_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - 2 \cdot j_{sa}^{ik} - 2 \cdot k_1 - 2 \cdot k_2)!}$$

$$\frac{1}{(n-s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} - s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s = D - n - 1 \wedge$$

$$2 \leq l_s \leq D + l_{ik} + j_{sa}^{ik} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq l_s \leq j^{sa} + j_{sa} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa}^{ik} + j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + l_s = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$n \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$\begin{aligned}
f_z S_{j_{ik}, j^{sa}}^{DOST} = & \left( \sum_{k=l} \sum_{(j_{ik}=j^{sa}+j_{sa}^{lk}-j_{sa})} \sum_{l_s+j_{sa}-l}^{l_s+j_{sa}-l} j^{sa}=l_{sa}+n-D \right. \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
& \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \left. \frac{(D + j^{sa} - l_{sa} - 1)!}{(D + j^{sa} - n - l_{sa} - 1)! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \\
& \left( \sum_{k=l} \sum_{(j_{ik}=l_s+n+j_{sa}^{lk}-D-1)}^{(j^{sa}+l_s-j_{sa}-1)} \sum_{l_s+j_{sa}-l}^{l_s+j_{sa}-l} j^{sa}=l_{sa}+n-D \right. \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
& \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \left. \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \right)
\end{aligned}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_s + n + j_{sa}^{ik} - D - 1)}^{l_{sa} - l + 1} \sum_{j^{sa} = l_s + j_{sa} - l + 1}$$

$$\sum_{n_i = n + \mathbb{k}_k}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa}}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_{ik} - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - j_{sa}^{ik} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_s + n + j_{sa}^{ik} - D - 1)}^{l_{sa} - l + 1} \sum_{j^{sa} = l_{sa} + n - D}$$

$$\sum_{n_i = n + \mathbb{k}_k}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$



$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \sum_{k=l}^{\binom{()}{l_s - l}} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(n_i - j_s)} \frac{1}{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - 2 \cdot k_1 - 2 \cdot k_2)!} \cdot \frac{1}{(n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n \wedge l_s > D - n + 1 \wedge D + l_s + j_{sa} - j_{sa}^{ik} + 2 \leq l \leq D - n + 1 \wedge j_{sa}^{ik} + 1 \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge D \geq n < n \wedge I = k > 0 \wedge j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$s \geq 5 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$\begin{aligned}
 f_z S_{j_{ik}, j_{sa}}^{DOST} &= \sum_{k=l} \sum_{(j_{ik}=l_s+n+j_{sa}^{ik}-D-1)}^{(l_s+j_{sa}^{ik}-l)} \sum_{j_{sa}=l_{sa}+n-D}^{l_{sa}-l+1} \\
 &\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}} \\
 &\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik})! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \\
 &\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l_{sa}^{ik})!}{(l_{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \\
 &\frac{(l_{ik} - j_{sa}^{ik})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \\
 &\sum_{k=l} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(l_s+j_{sa}^{ik}-l)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \\
 &\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 &\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{()} \\
 &\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!} \\
 &\frac{1}{(n - s)!}
 \end{aligned}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned} \sum_{j_{ik}, j_{sa}}^{DOST} &= \sum_{k=1}^n \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \\ &\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \\ &\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \\ &\left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \end{aligned}$$

$$\begin{aligned}
& \left( \sum_{k=l}^{(l_{sa}+n+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{(j_{ik}=l_s+n+j_{sa}^{ik}-D-1)}^{l_{sa}-l+1} \sum_{j^{sa}=l_{sa}+n-D} \right. \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
& \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - l)!}{(j_{ik} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(D + j_{sa}^{ik} - l_{sa} - s)!}{(D + j_{sa}^{ik} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})}^{(l_s+j_{sa}^{ik}-l)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{l_{sa}-l+1} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
& \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
\end{aligned}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)} j^{sa} = j_{sa}^{ik} + j_{sa} - j_{sa}^{ik}$$

$$\sum_{n=0}^n \sum_{(n_{is} = n - k)} (n_i - k + 1) j_{ik}$$

$$\sum_{n_{ij} = n_{is} + j_{sa}^{ik} - k - k_1} (n_{ij} - k_1 + 1) j^{sa} - k_2$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa} - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot k_1 - 2 \cdot k_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - 2 \cdot j_{sa}^{ik} - 2 \cdot k_1 - 2 \cdot k_2)!}$$

$$\frac{1}{(n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j_{sa}^{ik} - s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s = D - n - 1 \wedge$$

$$j_{sa}^{ik} + j_{sa} - j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa}$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_{sa}^{ik} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 \geq l_s - n_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$\begin{aligned}
 f_Z S_{j_{ik}, j^{sa}}^{DOST} &= \sum_{k=l} \sum_{(j_{ik}=j^{sa}+j_{sa}^{lk}-j_{sa})} \sum_{j^{sa}=l_{sa}+n-D}^{l_{ik}+j_{sa}-l-j_{sa}^{lk}+1} \\
 &\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_k-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 &\frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} + j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(j_{ik} - j_{sa} - 1)!}{(n - j_{ik} - j_{sa} - 1)! \cdot (j_{ik} - j_{sa} - 1)!} \cdot \frac{(D - l_{sa} - l_{sa} - s)!}{(D - j^{sa} - n - l_{sa} - s)! \cdot (n + j_{sa} - j^{sa} - s)!} \\
 &\sum_{k=l} \sum_{(j_{ik}=j^{sa}+j_{sa}^{lk}-j_{sa})} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_s+j_{sa}-l} \\
 &\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{lk}-j_{ik})}^{(n_i-j_s+1)} \\
 &\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{lk}-l_{k_1}} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \\
 &\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{lk} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{lk} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!} \cdot \frac{1}{(n - s)!} \\
 &\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 \geq l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_{j_{ik}^{sa}}^{DOST} = \sum_{k=l}^n \sum_{\substack{j_{ik} = j_{sa} + j_{sa}^{ik} - j_{sa} \\ j_{sa} = l_{ik} + n + j_{sa} - D - j_{sa}^{ik}}} \sum_{\substack{n_{ik} = n - k_1 + 1 \\ n_{sa} = n - j_{sa} + 1}} \frac{(n_{ik} - k_1 + 1)! \cdot (n_{ik} + j_{ik} - j_{sa} - k_2)!}{(n_{ik} - n_{sa} - 1)! \cdot (n_{ik} - k_1 - 1)!} \cdot \frac{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!}{(n_{ik} - n_{sa} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \sum_{k=l}^n \sum_{\substack{(\quad) \\ j_{ik} = j_{sa} + j_{sa}^{ik} - j_{sa}}} \sum_{\substack{l_s + j_{sa} - l \\ j^{sa} = l_i + n + j_{sa} - D - s}} \sum_{\substack{n \\ n_i = n + k}} \sum_{\substack{(n_i - j_s + 1) \\ (n_{is} = n + k + j_{sa}^{ik} - j_{ik})}}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{lk}-\mathbb{k}_1} \sum_{\binom{()}{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}$$

$$\frac{\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - \mathbb{k}_1 - 1)!}}{(D - l)!} \cdot \frac{(n - l)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n_{sa} + j_{sa} - j^{sa} - l_i)!}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 \geq l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik}$

$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} -$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\}$

$s \geq 5 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \dots + \mathbb{k}_2$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{lk}-D-j_{sa})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{lk}} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$



$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - j_{sa}^{sa} = j_{ik} - j_{sa}^{ik} - j_{sa}^{sa})} \sum_{(n_i = n + \mathbb{k}_1 + \mathbb{k}_2)} \sum_{(n_{ik} = n_{is} + j_{sa}^{ik} - \mathbb{k}_1)} \sum_{(n_{ik} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - j^{sa} - s - \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{sa}^{ik} - n_{sa} - j_{sa}^{sa} - n - j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!} \cdot \frac{1}{(n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n - 1 \wedge l_s > D - 1 + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} - j_{sa}^{sa} + j_{sa} - j_{sa} \wedge$$

$$j_{ik} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + j_{sa} \geq l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D \leq n < n \wedge I = \mathbb{k} > 0 \wedge$$

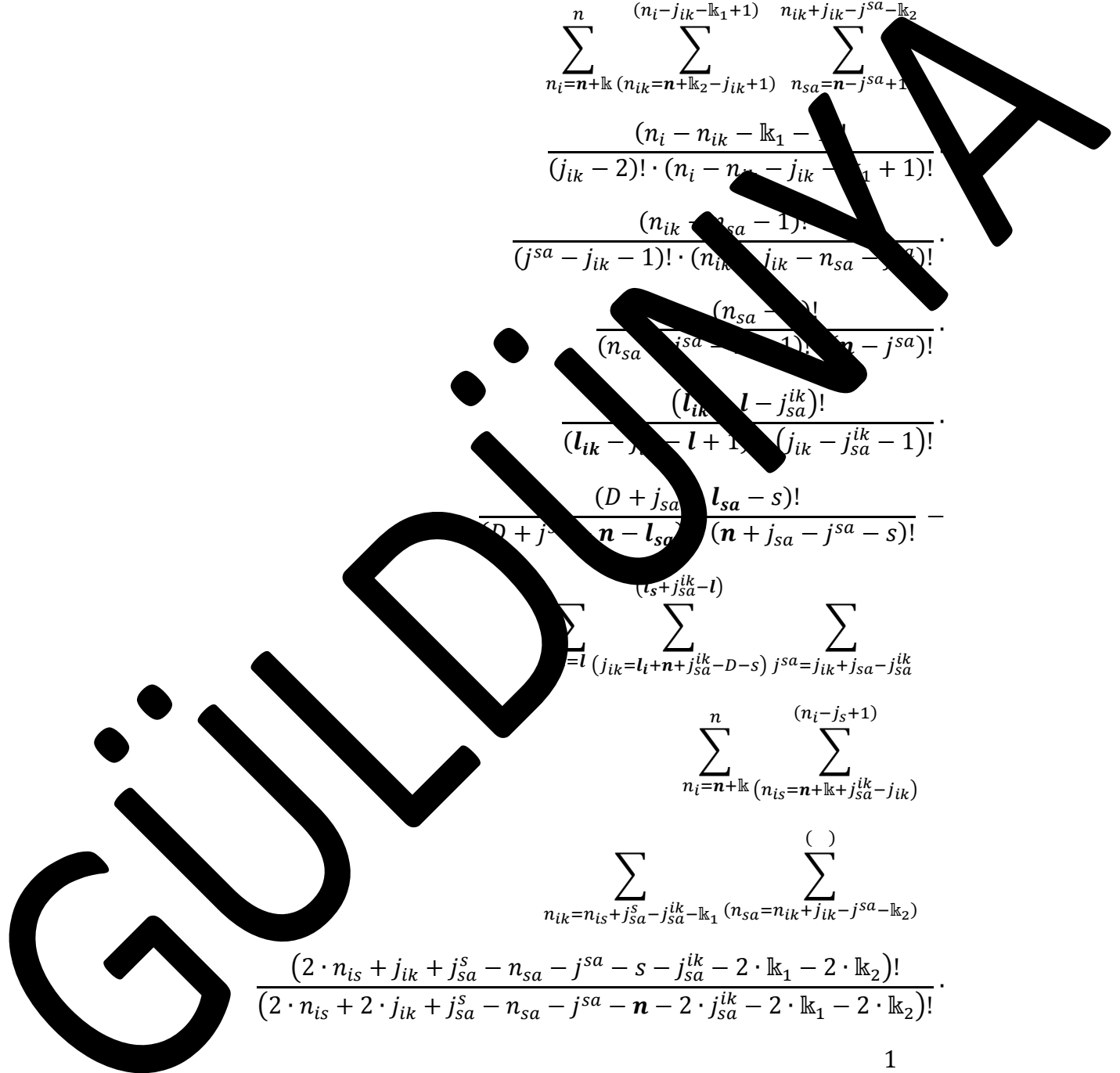
$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$\begin{aligned}
 f_z S_{j_{ik} j^{sa}}^{DOST} &= \sum_{k=l}^{(l_{sa} + j_{sa}^{ik} - l - j_{sa} + 1)} \sum_{(j_{ik} = l_{ik} + n - D)} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}} \\
 &\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \\
 &\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - 1)!} \\
 &\cdot \frac{(n_{sa} - 1)!}{(n_{sa} - j^{sa} - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \\
 &\cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \\
 &\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}} \\
 &\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)} \\
 &\sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - \mathbb{k}_1} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{()} \\
 &\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!} \\
 &\frac{1}{(n - s)!} \\
 &\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}
 \end{aligned}$$



$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$\begin{aligned} & \sum_{j_{ik}, j_{sa}^{ik}} f_z^{DOS} \sum_{j_{ik}=l_s+n+j_{sa}^{ik}-1}^{(j_{sa}^{ik}-j_{sa})} \sum_{j_{sa}^{ik}=l_i+n+j_{sa}-D-s}^{l_s+j_{sa}-l} \\ & \sum_{n_i=n+k}^{(n_i-n-k_1+1)} \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{ik}+j_{ik}-j_{sa}-k_2} \sum_{n_{sa}=n-j_{sa}+1} \\ & \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \\ & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\ & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\ & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\ & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\ & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \end{aligned}$$

$$\begin{aligned}
 & \sum_{k=l} \sum_{(j_{ik}=l_s+n+j_{sa}^{ik}-D-1)}^{(l_s+j_{sa}^{ik}-l)} \sum_{j_{sa}=l_s+j_{sa}-l+1}^{l+j_{sa}-l-s+1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j_{sa}}^{n_{ik}+j_{ik}-j_{sa}-k_2} \\
 & \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \\
 & \frac{(n_i - n_{sa} - 1)!}{(n_i + j_{sa} - n_{sa} - 1)! \cdot (n - j_{sa})!} \cdot \\
 & \frac{(l_{ik} - j_{ik} - 1)!}{(l_{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - 1)!}{(j_{ik} + j_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \\
 & \sum_{k=l} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})}^{( )} \sum_{j_{sa}=l_{sa}+n-D}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-k_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-k_2)}^{( )} \\
 & \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - s - j_{sa}^{ik} - 2 \cdot k_1 - 2 \cdot k_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot k_1 - 2 \cdot k_2)!} \\
 & \frac{1}{(n - s)!} \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}
 \end{aligned}$$

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$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$\begin{aligned} & \sum_{j_{ik}, j_{sa}^{ik}} f_z^{DOS} \sum_{j_{ik} = l_s + n + j_{sa}^{ik} - 1}^{(l_i + j_{sa}^{ik} - D - s - 1)} \sum_{j_{sa}^{ik} = l_i + j_{sa} - l - s + 1}^{(l_i + j_{sa}^{ik} - D - s - 1)} \\ & \sum_{n_{ik} = n + k_2 - j_{ik} + 1}^{(n_i - n_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{(n_i - n_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{(n_i - n_{ik} - k_1 + 1)} \\ & \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \\ & \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \\ & \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \end{aligned}$$

$$\begin{aligned}
 & \sum_{k=l} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(l_s+j_{sa}^{ik}-l)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{l_i+j_{sa}-l-s+1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-k_2} \\
 & \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_i - 1)!}{(n_i + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - j_{ik} - 1)!}{(l_{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - 1)!}{(j_{ik} + j_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})}^{(l_{ik}-l+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-k_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \\
 & \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot k_1 - 2 \cdot k_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot k_1 - 2 \cdot k_2)!} \cdot \\
 & \frac{1}{(n - s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
 \end{aligned}$$

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$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{ik} \leq j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + 1 \Rightarrow$$

$$fz S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(\quad)} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\quad)} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot$$

$$\sum_{k=l}^{l_{sa} - l} \sum_{(j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}^{sa})}^{l_{sa} - l} \sum_{(j_{sa} = l_i + n + j_{sa}^{sa} - D - s)}^{l_{sa} - l} \cdot$$

$$\sum_{n_i = n + k}^{n_i} \sum_{(n_i = n + k + j_{sa}^{ik} - j_{ik})}^{n_i} \cdot$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^{ik} - k_1}^{n_{ik}} \sum_{(n_{ik} = n_{is} + j_{sa}^{ik} - k_1)}^{n_{ik}} \cdot$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - j^{sa} - s - k - 2 \cdot k_1 - 2 \cdot k_2)!}{(2 \cdot n_{is} + 2 \cdot j_{sa}^s - n_{sa} - j^{sa} - n - j_{sa}^{ik} - 2 \cdot k_1 - 2 \cdot k_2)!} \cdot$$

$$\frac{1}{(n - s)!} \cdot$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$



$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z S_{j_{ik}}^{D, T} = \sum_{k=l}^{(l_{sa} + j_{sa}^{ik} - j_{sa} + 1)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)}^{(n - k_1 + 1)} j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik} \sum_{n_i = n + k}^{(n_i - k_1 + 1)} \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_{ik} + j_{ik} - j_{sa} - k_2)} \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{sa} - j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)}^{(n - k_1 + 1)} \sum_{(n_i = n + k)}^{(n_i - j_s + 1)} \sum_{(n_{is} = n + k_2 + j_{sa}^{ik} - j_{ik})}^{(n_{ik} + j_{ik} - j_{sa} - k_2)}$$

$$\sum_{n_i = n + k}^{(n - k_1 + 1)} \sum_{(n_{is} = n + k_2 + j_{sa}^{ik} - j_{ik})}^{(n_{ik} + j_{ik} - j_{sa} - k_2)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{\binom{()}{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}$$

$$\frac{\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - \mathbb{k}_1 - 1)!}}{(D - l - 1)!} \cdot \frac{(n - l - 1)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n_{is} + j_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge (l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge (l_i + j_{sa} - s = l_{sa})) \wedge$$

$$D \geq n < n \wedge l_s > 0 \wedge$$

$$j_{sa} \leq j_{sa} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i, \dots, j_{sa}^i\} \wedge$$

$$s > n - 1 = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z^{\mathcal{S}_{j_{ik}, j_{sa}^{DOST}}} = \sum_{k=l} \sum_{\binom{()}{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}} \sum_{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_i-j_{ik}-\mathbb{k}_1+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa} - n_{sa} - 1)!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + j_{sa} - l_{sa})!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - l_{sa})!}$$

$$\sum_{k=0}^{\lfloor \frac{l_s + j_{sa} - l}{2} \rfloor} \binom{l_s + j_{sa} - l}{k} \binom{n_{sa} - D - s}{l_s + j_{sa} - l - k}$$

$$\sum_{n_{is}=n+l_k}^{(n_i - j_s + 1)} \sum_{n_{sa}=n+l_k+j_{sa}^{ik}-j_{ik}}$$

$$\sum_{k=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1}^{\lfloor \frac{n_{sa}-n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}{2} \rfloor} \binom{n_{sa}-n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}{k}$$

$$\frac{(2 \cdot n_{is} + j_{ik} - j_{sa}^s - n_{sa})! \cdot (j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!} \cdot \frac{1}{(n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$(D \geq n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_{i_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{ik}-l+1)} \sum_{j_{sa}^{ik} = j_{sa} - j_{sa}^{ik}} \sum_{n_i = n + \mathbb{k}}^n \sum_{n_{ik} = n_{sa} - j_{ik} + 1}^{(n_i - j_{ik} - \mathbb{k}_1 - 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa}^{ik} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa}^{ik})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa}^{ik})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa}^{ik} - s)!} \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{j_{sa}^{ik} = j_{ik} + j_{sa} - j_{sa}^{ik}} \sum_{n_i = n + \mathbb{k}}^n \sum_{n_{is} = n + \mathbb{k} + j_{sa}^{ik} - j_{ik}}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{\binom{()}{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (j_{sa} - j_{sa}^{ik} - 1)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge (l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge (l_i + j_{sa} - s = l_{sa})) \wedge$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa} \leq j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i, \dots, j_{sa}^i\} \wedge$$

$$s > n - l_s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z^{S_{j_{ik}, j_{sa}^{DOST}}} = \sum_{k=l}^{(j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(j_{ik}=l_{ik}+n-D)}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik})} \sum_{j_{ik}=j_{sa}^{ik}+n-D}^{l_{ik}+j_{sa}^{ik}-1} \sum_{j^{sa}=j_{ik}+j_{sa}-l-j_{sa}^{ik}+2}$$

$$\sum_{n_i=n+l_{sa}+j_{sa}^{ik}+l_{ik}+j_{sa}-j_{ik}+1}^n \sum_{n_{sa}=n-j^{sa}+1}^{(n_i-j_{ik}-\mathbb{k}_1+1) \cdot (n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{( )} \sum_{j_{ik}=j_{sa}^{ik}+j_{sa}^{ik}-j_{sa}}^{( )} \sum_{j^{sa}=l_{sa}+n-D}^{l_s+j_{sa}-l}$$

GUIDANCE

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{()}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - \mathbf{n} - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}$$

$$\frac{1}{(s)!}$$

$$\frac{(l_s - 1)!}{(l_s + j_{ik} - l)! \cdot (j_{ik} - j_{sa} - 1)!}$$

$$\frac{(D + l_i)!}{(D + j_{sa} + s - l + l_i - j_{sa} - j_{sa} - (n + j_{sa} - j_{sa} - s))!}$$

$$((D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa})) \wedge$$

$$D \geq \mathbf{n} < n \wedge \mathbb{k} > \mathbb{k}_1 \wedge$$

$$j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_2: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz S_{j_{ik} j_{sa}}^{DOST} = \sum_{k=l}^{(l_i+n+j_{sa}^{ik}-D-s-1)} \sum_{(j_{ik}=l_{ik}+n-D)}^{l_i+j_{sa}-l-s+1} \sum_{j_{sa}=l_i+n+j_{sa}-D-s}$$

$$\begin{aligned}
& \sum_{n_i=n+\mathbb{k}}^n \sum_{\substack{(n_i-j_{ik}-\mathbb{k}_1+1) \\ (n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}} \sum_{\substack{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2 \\ n_{sa}=n-j^{sa}+1}} \\
& \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=l}^{l_{ik}-1} \frac{(l_{ik}-k-1)!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik} - k)!} \sum_{\substack{l_i+j_{sa}-l-s+1 \\ j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{\substack{(n_i-j_{ik}-\mathbb{k}_1+1) \\ (n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}} \sum_{\substack{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2 \\ n_{sa}=n-j^{sa}+1}} \\
& \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -
\end{aligned}$$



$$\sum_{k=l}^{\binom{l_s + j_{sa}^{ik} - l}{j_{ik} = l_{sa} + n + j_{sa}^{ik} - D - j_{sa}}} \sum_{n_i = n + k}^n \sum_{n_{is} = n + k + j_{sa}^{ik} - (n_{sa} = n_{ik} + j_{ik} + j_{sa} - k_2)}^{\binom{n_i - j_s + 1}{n_{is} = n + k + j_{sa}^{ik} - (n_{sa} = n_{ik} + j_{ik} + j_{sa} - k_2)}} \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot k_1 - 2 \cdot k_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot k_1 - 2 \cdot k_2)!} \cdot \frac{1}{(n-s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(l_s + j_{sa}^{ik} + s - n - l_i - j_{sa}^{ik} - 1)! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_{ik, j_{sa}}^{DOST} = \sum_{k=l}^{(j_{sa} + j_{sa}^{ik} - j_{sa}) + j_{sa} - l - j_{sa}^{ik} + 1} \sum_{(j_{ik} = l_{ik} + n - D)}^{n-D} \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n_{sa} - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 - 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1))!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa}^{ik} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa}^{ik})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa}^{ik})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} + \sum_{k=l}^{(l_{ik} - l + 1)} \sum_{(j_{ik} = l_{ik} + n - D)}^{l_{sa} - l + 1} \sum_{j_{sa} = l_{ik} + j_{sa} - l - j_{sa}^{ik} + 2}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}}$$

$$\frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - 1)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_s - l - j_{sa})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} - l_{sa} - j_{sa})!}{(j_{ik} + j_{sa} - j_{sa} - l_{ik})! \cdot (j^{sa} - j_{sa}^{ik} - j_{sa})!}$$

$$\frac{(n + j_{sa} - n - s)!}{(n + j_{sa} - n - 1)! \cdot (n - j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{( )} \sum_{(j_{sa}^{ik}-j_{sa})}^{l_s+j_{sa}-l} j^{sa}=l_i+n+j_{sa}-D-s$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}}^{( )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{( )}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!}$$

$$\frac{1}{(n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \wedge$$

$$D \geq n < n \wedge I = \dots > 0 \wedge$$

$$j_{sa}^{ik} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{s_1, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, j_{sa}^i, \dots, j_{sa}^s\}$$

$$s \geq 5 \wedge \dots = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k}_1 + \dots \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{sa}+n+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{(j_{ik}=l_{ik}+n-D)}^{l_{sa}-l+1} \sum_{j_{sa}=l_{sa}+n-D}^{n} \sum_{(n_i-j_{ik}-\mathbb{k}_1+1)}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{n_{sa}=n-j_{sa}+1} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa})!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa})!} +$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{n_i=l_{sa}+n}^{(n_i-j_{ik}-l+1)} \sum_{n_{sa}=n-j^{sa}+1}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \dots$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n_{sa}-j_{ik}+1)}^{(n_i-j_{ik}-l+1)} \sum_{n_{sa}=n-j^{sa}+1}^{(n_{ik}+j_{ik}-j^{sa}-k_2)}$$

$$\frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - (n_i - n_{ik} - j_{ik} - k_1 + 1))!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_s+j_{sa}^{ik}-l)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(n_i-j_{ik}-l+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

GÜLDÜZ

$$\frac{\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{sa}-\mathbb{k}_2)}^{(\quad)} \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!} \cdot \frac{1}{(n-s)!} \cdot \frac{(l_s - 1)!}{(l_s + j_{ik} - l)!} \cdot \frac{(j_{ik} - j_{sa}^{ik} - 1)!}{(D - l_i)!}}{(D - j^{sa} + s - l_i - j_{sa}^{sa} - (n + j_{sa} - j^{sa} - s))!}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{sa} - j_{sa} = l_{ik} \wedge l_s + j_{sa} - s > l_{sa} \wedge$

$D \geq n < n \wedge l = 1 > 0 \wedge$

$j_s \leq j_{sa} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa} - 1 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, j_{sa}, \dots, i\} \wedge$

$s \geq 5 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k}_2 = \mathbb{k}_1 + 1 \Rightarrow$

$$f_z S_{j_{ik} j_{sa}}^{DOST} = \sum_{k=l} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})}^{(\quad)} \sum_{j^{sa}=l_s+n+j_{sa}-D-1}^{l_s+j_{sa}-l}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{\binom{D}{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}^{sa}}}$$

$$\sum_{k_1=0}^{\binom{D-l_{sa}-j_{sa}^{sa}}{n_{is}=n+k_1+j_{sa}^{ik}-j_{ik}}}$$

$$\sum_{k_2=0}^{\binom{D-l_{sa}-j_{sa}^{sa}-k_1}{n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2}}$$

$$\frac{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - j_{sa}^{ik} - 2 \cdot k_1 - 2 \cdot k_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot k_1 - 2 \cdot k_2)!}$$

$$\frac{1}{(n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s > n - 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{sa} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_s + n + j_{sa}^{ik} - D - 1)} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + j_{sa} - j_{sa}^{ik} - 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{(n_{is} = n + \mathbb{k} + j_{sa}^{ik} - j_{ik})}^{(n_{ik} + j_{sa} - j_{sa}^{ik} - 1)}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(j_{sa}^{ik} - \mathbb{k}_k - 1)! \cdot (n_{ik} + j_{ik} - j_{sa}^{ik} - 1)!}{(n_{sa} - j_{sa} - n - 1)! \cdot (n - j_{sa})!}$$

$$\frac{(n_i - l - j_{sa}^{ik})!}{(n_{is} - j_{is} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

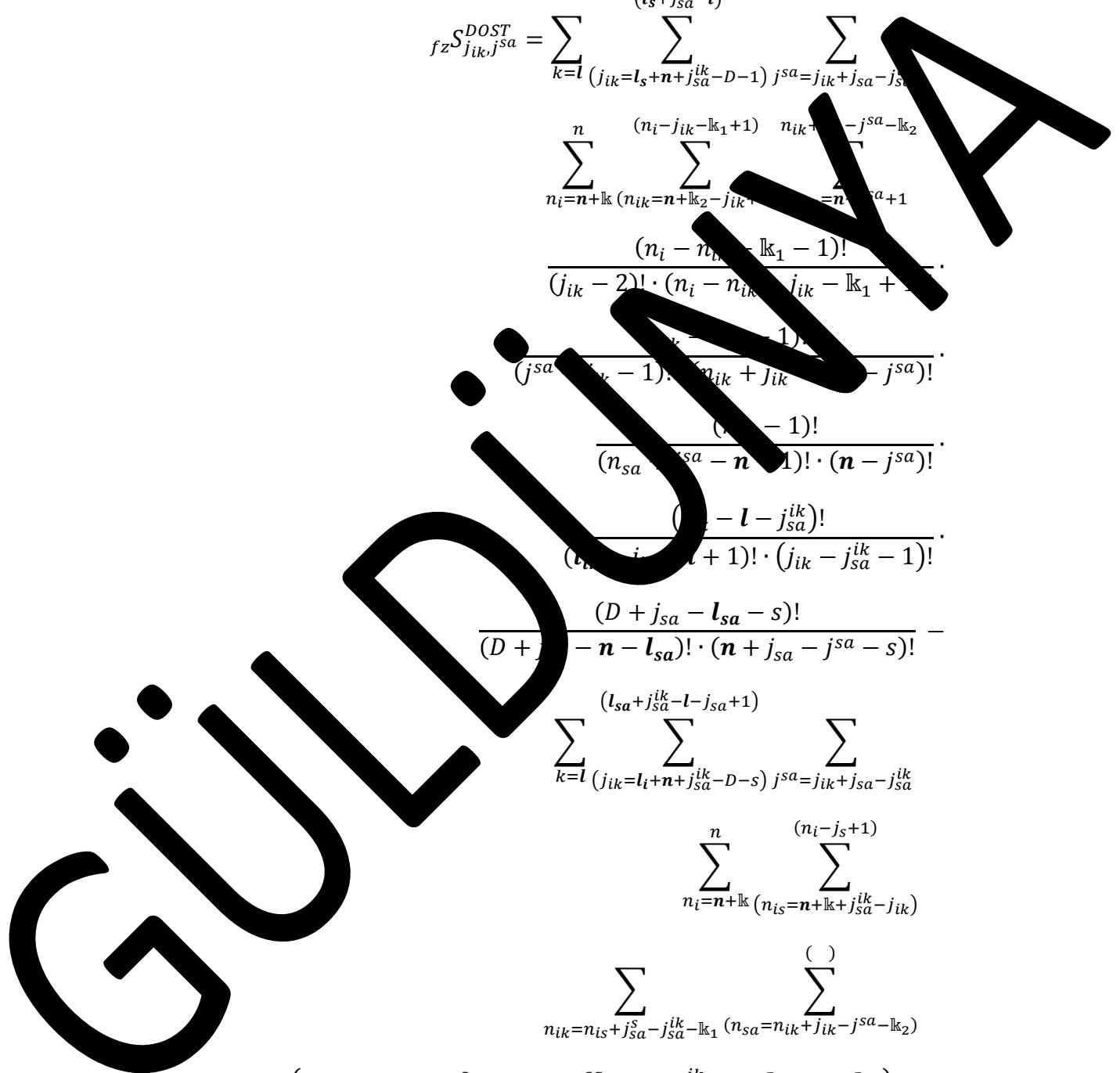
$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l - j_{sa} + 1)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - \mathbb{k}_1} \sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)}^{()}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}$$

$$\frac{1}{(n - s)!}$$





$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_{z^s}^{j_{ik}^{sa}} = \sum_{k=l}^n \binom{l_i + j_{sa} - l - s + 1}{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}} j^{sa} = l_i + n + j_{sa} - D - s$$

$$\sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - k_2}$$

$$\frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l} \sum_{\binom{()}{j_{ik}=j^{sa}+j_{sa}^{lk}-j_{sa}}} \sum_{l_s+j_{sa}-l}^{l_s+j_{sa}-l} j^{sa} = l_{ik} + n + j_{sa} - D - j_{sa}^{ik}$$

$$\sum_{n_i=n+l_k}^n \sum_{\binom{()}{n_i=n+l_k+j_{sa}^{ik}-j_{sa}^{ik}}} \sum_{n_i-j_s+1}^{n_i-j_s+1}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}} \sum_{\binom{()}{n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}^{ik}}} \sum_{n_{sa}-l_{k_2}}^{n_{sa}-l_{k_2}}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!} \cdot \frac{1}{(n-s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + l_i - n - l_i - j_{sa}^{ik})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$D \geq n < n \wedge l_s > D - n \wedge l_i \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa}^{ik}$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa}^{ik} \leq n + j_{sa} - s$

$l_i - j_{sa}^{ik} + 1 \leq l_s \wedge l_{sa} - j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$D > n < n \wedge l = l_i \geq 0 \wedge$

$j_{sa} \leq j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} = j_{sa}^{ik} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, l_{k_2}, j_{sa}^{ik}, \dots, j_{sa}^i\} \wedge$

$s \leq s \wedge l_{k_1} = s + l_{k_1} \wedge$

$l_{k_z}: z = 2, \dots, l = l_{k_1} + l_{k_2} \Rightarrow$

$$f_z^{S_{j_{ik}, j_{sa}^{ik}}} = \sum_{k=l} \sum_{\binom{()}{l_i+j_{sa}^{ik}-l-s+1}} \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s} j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - 1)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - j_{sa})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_s - l - j_{sa} - s)!}{(l_s + j_{sa} - n - 1)! \cdot (n - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{(l_s + j_{sa} - l)} \sum_{(j_{ik} - j_{ik} + n - D)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{()} \\
 & \frac{(2 \cdot n_{is} - j_{ik} - n_{sa} - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!} \cdot \\
 & \frac{1}{(n - s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_{j_{ik}, j_{sa}}^{SD} = \sum_{l=1}^{n+j_{sa}^{ik}-j_{sa}} \sum_{j_{ik}=l_s}^{n+j_{sa}^{ik}-D-1} \sum_{j_{sa}=l_{sa}+n-D}^{l_s+j_{sa}-l} \\ \sum_{n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \\ \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\ \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\ \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\ \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\ \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\ \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\begin{aligned}
& \sum_{k=l} \sum_{(j_{ik}=l_s+n+j_{sa}^{ik}-D-1)}^{(l_s+j_{sa}^{ik}-l)} \sum_{j^{sa}=l_s+j_{sa}-l+1}^{l_{sa}-l+1} \\
& \sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-k_2} \\
& \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_i - j^{sa} - n - 1)!}{(n_i + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{ik} - j_{ik} - 1)!}{(l_{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - 1)!}{(j_{ik} + j_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \\
& \sum_{k=l} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{()} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \\
& \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-k_1}^{()} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \\
& \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot k_1 - 2 \cdot k_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot k_1 - 2 \cdot k_2)!} \\
& \frac{1}{(n - s)!} \\
& \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}
\end{aligned}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz = \sum_{k=1}^{(l_{sa} + n + j_{sa}^{ik} - D - j_{sa} - 1)} \sum_{(j_{ik} = l_s + n + j_{sa}^{ik} - D - 1)}^{l_{sa} - l + 1} \sum_{j^{sa} = l_{sa} + n - D}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} +$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_{sa} + n + j_{sa}^{ik} - D - j_{sa})}^{l_{sa} - l + 1} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k + j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - k_2)}^{n_{ik} + j_{ik} - j_{sa} - k_2}$$

$$\frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - j_{sa} - k_1 - 1)! \cdot (n_i - n_{ik} - k_1 + 1)!}$$

$$\frac{(n_{sa} - 1)!}{(j_{sa} - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - j_{ik} - n_{sa} - j_{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} -$$

$$\sum_{k=l}^{(l_{ik} - l + 1)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)}^{(l_{ik} - l + 1)} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - k_1} \sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - k_2)}^{( )}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - s - j_{sa}^{ik} - 2 \cdot k_1 - 2 \cdot k_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot k_1 - 2 \cdot k_2)!}$$

$$\frac{1}{(n-s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa})!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - n \wedge l_i \leq D + s - n \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$\begin{aligned} f_z S_{j_{ik}, j_{sa}}^{DOST} &= \sum_{k=l}^{(j^{sa} + j_{sa}^{ik} - j_{sa})} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_s + j_{sa} - l} \sum_{j^{sa} = j_{sa} + 1} \\ &\sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - k_2} \\ &\frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \end{aligned}$$



$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} +$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{sa} - l + 1} \sum_{j_{sa} = l + j_{sa} - l + 1}^{l_{sa} - l + 1}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{(n_{is} = n + k + j_{sa} - k_2)}^{(n_{is} + j_{sa} - k_2)}$$

$$\frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - j_{sa} - k_1 - 1)! \cdot (n_i - n_{ik} - k_1 + 1)!}$$

$$\frac{(n_{sa} - n_{sa} - 1)!}{(j_{sa} - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - k_1 + j_{ik} - n_{sa} - j_{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} -$$

$$\sum_{k=l}^{( )} \sum_{(j_{ik} = j_{sa} + j_{sa}^{ik} - j_{sa})}^{( )} \sum_{j_{sa} = j_{sa} + 1}^{l_s + j_{sa} - l}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - k_1} \sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - k_2)}^{( )}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - s - j_{sa}^{ik} - 2 \cdot k_1 - 2 \cdot k_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot k_1 - 2 \cdot k_2)!}$$

$$\frac{1}{(n-s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa})!}$$

$$D \geq n < n \wedge l \neq i \wedge l_{sa} \leq D + j_{sa} - n \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 =$$

$$S_{j_{ik} j_{sa}}^{DOST} = \left( \sum_{k=l} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{j^{sa}=j_{sa}+1}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \right. \\ \sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-k_2} \\ \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \\ \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\ \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\ \left. \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \right) + \\ \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\begin{aligned}
& \left( \sum_{k=l}^{(j^{sa} + j_{sa}^{ik} - j_{sa} - 1)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)} \sum_{j^{sa} = j_{sa} + 2} \right. \\
& \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa}}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \\
& \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - l)!}{(j_{ik} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j^{sa})!} \cdot \\
& \frac{(D + j_{sa}^{ik} - l_{sa} - s)!}{(D + j_{sa}^{ik} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=l}^{(l_{ik} - l + 1)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)} \sum_{j^{sa} = l_{ik} + j_{sa} - l - j_{sa}^{ik} + 2}^{l_{sa} - l + 1} \\
& \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \\
& \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}
\end{aligned}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=l}^{( )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{( )} \sum_{j^{sa}=j_{sa}+1}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}}$$

$$\sum_{n=n+\mathbb{k}}^n \sum_{(n_{is}=n)}^{(n_i+1)} \sum_{(j_{ik})}$$

$$\sum_{(n_{ij}=n_{is}+j_{sa}^{ik}-\mathbb{k}_1)}^{( )} \sum_{(n_{ik}=j^{sa}-\mathbb{k}_2)}^{( )}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa} - n_{sa} - j^{sa} - s - j_{sa} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - 2 \cdot j_{sa}^s - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}$$

$$\frac{1}{(n - s)!}$$

$$(l_s - l - 1)!$$

$$(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!$$

$$(D - l_i)!$$

$$(D + j^{sa} - s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!$$

$$D \geq n < n \wedge l_s = l \wedge l_s = D - n \wedge$$

$$j_{sa}^{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s + l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j^{sa} - n \wedge$$

$$n > n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z^{\mathcal{S}DOST}_{j_{ik}, j^{sa}} = \left( \sum_{k=l} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(j^{sa}=j_{sa}+1)} \binom{l_s+j_{sa}-l}{j^{sa}=j_{sa}+1} \right. \\ \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\ \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \\ \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \\ \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \\ \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \\ \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \\ \left( \sum_{k=l} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{(j^{sa}=j_{sa}+2)} \binom{j^{sa}+j_{sa}^{ik}-j_{sa}-1}{j^{sa}=j_{sa}+2} \sum_{(j^{sa}=j_{sa}+1)} \binom{l_s+j_{sa}-l}{j^{sa}=j_{sa}+1} \right. \\ \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\ \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \\ \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \\ \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \\ \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \\ \left. \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \right)$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{sa} - l + 1} \sum_{j^{sa} = l_s + j_{sa} - l + 1}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa}}$$

$$\frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - k_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (j^{sa})!} \cdot$$

$$\frac{(l_{ik} - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + j_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\left( \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) -$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - k_1} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - k_2)}^{( )}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot k_1 - 2 \cdot k_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot k_1 - 2 \cdot k_2)!} \cdot$$

$$\frac{1}{(n - s)!} \cdot$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_{sa} \leq D + j_{sa} - n \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$\sum_{k=l}^{l+1} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-k_2} \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\begin{aligned}
 & \left( \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_{sa}-l+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1} \right. \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}^{ik}}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_i + j^{sa} - n - 1)! \cdot (n - j^{sa} - 1)!}{(n_i - j_{ik} - l_{k_1} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{ik} - l_{ik} - j_{sa})!}{(j_{ik} + j_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \left. \frac{(D + j_{sa} - n_{sa} - s)!}{(D + j_{sa} - n_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) - \\
 & \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{()} \\
 & \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!} \cdot \\
 & \frac{1}{(n - s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}
 \end{aligned}$$

GÜLDENWA



$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - n \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$\begin{aligned} f_z S_{j_{ik}}^D &= \left( \sum_{k=1}^{j_{sa}^{ik}-l} \sum_{l_k=j_{sa}^{ik}+1}^{j_{sa}^{ik}-l} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \right) \\ &\sum_{i=n+k}^n \sum_{n_{ik}=n+k_2-j_{ik}+1}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-k_2} \\ &\frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \\ &\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\ &\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\ &\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\ &\left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \end{aligned}$$

$$\begin{aligned}
 & \left( \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{sa} - l + 1} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik} + 1} \right. \\
 & \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa}}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \\
 & \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} - j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{ik} - 1)!}{(l_{ik} - j_{ik} - l - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - 1)!}{(j_{ik} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \left. \frac{(n_{sa} + j_{sa}^{ik} - l_{sa} - s)!}{(D + j_{sa}^{ik} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) - \\
 & \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{sa} - l + 1} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}} \\
 & \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)} \\
 & \sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - \mathbb{k}_1}^{(\quad)} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\quad)} \\
 & \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!} \\
 & \frac{1}{(n - s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}
 \end{aligned}$$

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$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - n \wedge l_i \leq D + s - n \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_{z, j_{sa}^{ST}} = \sum_{k=1}^{j_{sa}^{ik}-l} \sum_{k=j_{sa}^{ik}+1}^{l_{sa}-l+1} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{l_{sa}-l+1}$$

$$\sum_{i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-k_2}$$

$$\frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{\sum_{i=1}^s (l_i + j_{sa}^{ik} - l)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{sa}^{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1}^{\sum_{i=1}^s (n_i - j_s + 1)} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}^{ik}-\mathbb{k}_2)}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!} \cdot \frac{1}{(n-s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(n + j_{sa} + s - n - l_i - j_{sa}^{ik} - 1)! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$D \geq n < n \wedge l \neq l \wedge l_s \leq D - n + 1 \wedge$   
 $2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$   
 $j_{sa}^{ik} \leq l_{sa} \leq j^{sa} + j_{sa} - j_{sa} - 1 \wedge$   
 $j_{sa}^{ik} + j_{sa} - j_{sa}^{ik} - 1 \leq j^{sa} - n + j_{sa} - s \wedge$   
 $l_{ik} - j_{sa}^{ik} + 1 = l_{sa} - j_{sa}^{ik} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$   
 $D + j_{sa} - n < l_{sa} \leq D - l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$   
 $D \geq n < n \wedge \mathbb{k}_2 > \mathbb{k}_1 \wedge$   
 $j_{sa}^{ik} \leq j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$   
 $s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$   
 $s \geq 5 \wedge s = s + \mathbb{k} \wedge$   
 $\mathbb{k}_2: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$\begin{aligned}
f_Z S_{j_{ik}, j^{sa}}^{DOST} = & \left( \sum_{k=l} \sum_{(j_{ik}=j^{sa}+j_{sa}^{lk}-j_{sa})} \sum_{j^{sa}=l_{sa}+n-D}^{l_{ik}+j_{sa}-l-j_{sa}^{lk}+1} \right. \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
& \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{lk})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{lk} - 1)!} \cdot \\
& \left. \frac{(D + j_{sa} - l_{sa} - 1)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \\
& \left( \sum_{k=l} \sum_{(j_{ik}=j_{sa}^{lk}+1)} \sum_{j^{sa}=l_{sa}+n-D}^{(j^{sa}+j_{sa}-j_{sa}^{lk}-1) l_{ik}+j_{sa}-l-j_{sa}^{lk}+1} \right. \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
& \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{lk})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{lk} - 1)!} \cdot \\
& \left. \frac{(l_{sa} + j_{sa}^{lk} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{lk} - j_{ik} - j_{sa})!} \right)
\end{aligned}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_{sa}-l+1} \sum_{j^{sa}=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}}$$

$$\frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - l_{k_1} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + n_{sa} - j^{sa} - 1)!} \cdot$$

$$\frac{(n_{sa} + j^{sa} - n - 1)!}{(n_{sa} - j^{sa} - 1)!} \cdot$$

$$\frac{(l_{ik} - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(l_{sa} + j_{sa}^{ik})! \cdot (l_{ik} - j_{sa}^{ik})!}{(j_{ik} + j_{sa}^{ik} - j^{sa} - 1)! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}^{ik})!} \cdot$$

$$\left( \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) -$$

$$\sum_{k=l}^{( )} \sum_{(j_{ik}=j_{sa}^s+j_{sa}^{ik}-j_{sa})}^{( )} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}}^{( )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{( )}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!}$$

$$\frac{1}{(n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i^l \wedge l_s \leq D - n + 1 \wedge$$

$$D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 2 \leq l \leq i^l - 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2$$

$$\begin{aligned} j_{ik} j_{sa}^{DOST} &= \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_{sa}-l+1} \sum_{j^{sa}=l_{sa}+n-D} \\ &\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\ &\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \end{aligned}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+l}^n \sum_{(n_{is}+j_{sa}^{ik}-j_{ik})}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}} \sum_{(n_{ik}-j_{sa}-l_{k_2})}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^{ik} - n_{sa} - j_{sa}^{ik} - s - j_{sa}^{ik} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^{ik} - n_{sa} - j_{sa}^{ik} - 2 \cdot j_{sa}^{ik} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!}$$

$$\frac{1}{(n-s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j_{sa}^{ik} - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$D \geq n < n \wedge l = j \wedge l_s = D - n + 1 \wedge$$

$$2 \leq l < D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} + j_{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + j_{sa} = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{ik} + j_{sa} - j_{sa}^{ik} < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge l = l > 0 \wedge$$

$$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, l_{k_2}, j_{sa}, \dots, j_{sa}^l\} \wedge$$



$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j^{sa}}^{DOST} = \left( \sum_{k=l} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{j^{sa}=l_{sa}+n-D}^{l_s+j_{sa}-l} \right.$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\left. \frac{(D + j_{sa} - n - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) +$$

$$\left( \sum_{k=l} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(j^{sa}+j_{sa}^{ik}-j_{sa}-1)} \sum_{j^{sa}=l_{sa}+n-D}^{l_s+j_{sa}-l} \right.$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{j_{sa}^{sa} = l + j_{sa} - l + 1}^{l_{sa} - l + 1}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{(n_{sa} = n_{ik} + j_{sa} - j^{sa} - k_2)}^{(n_{sa} - n_{ik} - j^{sa} - k_2)}$$

$$\frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - j_{sa} - k_1 - 1)! \cdot (n_i - n_{ik} - j_{sa} - k_1 + 1)!}$$

$$\frac{(n_{sa} - n_{ik} - j^{sa} - 1)!}{(j^{sa} - j_{sa} - 1)! \cdot (n_{sa} - n_{ik} - j_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=l}^{( )} \sum_{(j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa})}^{( )} \sum_{j^{sa} = l_i + n + j_{sa} - D - s}^{l_s + j_{sa} - l}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - k_1}^{( )} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - k_2)}^{( )}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot k_1 - 2 \cdot k_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot k_1 - 2 \cdot k_2)!}$$

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$$\frac{1}{(n-s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa})!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 2 \leq l \leq i - 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_Z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{sa} - l + 1} \sum_{j^{sa} = l_{sa} + n - D}^{n} \sum_{n_i = n + k}^{(n_i - j_{ik} - k_1 + 1)} \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{n_{ik} + j_{ik} - j^{sa} - k_2} \sum_{n_{sa} = n - j^{sa} + 1} \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D) \wedge (j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})} \sum_{(n_i - j_s) \wedge (n_i + l_k + j_{sa}^{ik} - j_{ik})} \sum_{(n_{ik} = n_{is} + j_{sa}^{ik} - l_{k_1}) \wedge (n_{ik} + j_{ik} - j^{sa} - l_{k_2})} \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!}{(2 \cdot n_{is} + 2 \cdot j_{sa}^{ik} - n_{sa} - j^{sa} - n - j_{sa}^{ik} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!} \cdot \frac{1}{(n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$l \geq n < n \wedge l \neq i \wedge l \leq D - n + 1 \wedge$$

$$2 \leq l < D + l_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} - j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{sa}^{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \left( \sum_{k=l} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})}^{(l_{ik}-l+1)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}} \right. \\ \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik})}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+\mathbb{k}_2}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \\ \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \\ \left. \frac{(n - l - j_{sa}^{ik})!}{(n - j_{ik} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \right) + \\ \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} + \\ \left( \sum_{k=l} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(l_{sa}+n+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{j_{sa}=l_{sa}+n-D}^{l_{sa}-l+1} \right. \\ \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \\ \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \\ \left. \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \right)$$

$$\begin{aligned}
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-j_{sa})}^{l_{sa}+l+1} \sum_{(j_{sa}=j_{ik}+j_{sa}^{ik}-j_{sa}^{ik}+1)} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_i-j_{ik}+1)}^{(n_i-j_{ik}+1)} \sum_{(n_{ik}+j_{ik}-l_{k2})}^{(n_{ik}+j_{ik}-l_{k2})} \sum_{(n_{sa}=n-j^{sa}+1)} \\
 & \frac{(n_{ik}-j_{ik}-l_{k1}+1)!}{(j_{ik}-l_{k1}+1)! \cdot (n_{ik}-j_{ik}-l_{k1}+1)!} \cdot \\
 & \frac{(n_{sa}-j_{sa}+1)!}{(j_{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa})!} \cdot \\
 & \frac{(n_{sa}-1)!}{(j^{sa}-n-1)! \cdot (n-j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) - \\
 & \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{l_{sa}+l+1} \sum_{j^{sa}=j_{ik}+j_{sa}^{ik}-j_{sa}^{ik}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k1}} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k2})}^{( )}
 \end{aligned}$$

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$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!} \cdot \frac{1}{(n-s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - l)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - \mathbb{k} \wedge j_{sa}^s < j_{sa}^{ik} - \mathbb{k} \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\}$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_2 \cdot z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2$$

$$f_z S_{j_{ik} j_{sa}}^{DOST} = \left( \sum_{k=l} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})}^{(l_s+j_{sa}^{ik}-l)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \right)$$

$$\begin{aligned}
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \left( \sum_{k=l}^{(l_{sa} + n + j_{sa}^{ik} - D - j_{sa} - 1)} \sum_{(j_{ik} = j_{sa}^{ik} + j^{sa} = j_{sa} - l + 1)} \sum_{j_{sa} = j_{sa} - l + 1}^{n - D} \right) \cdot \\
 & \sum_{n_i = n + \mathbb{k}_1}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \\
 & \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_{sa} + n + j_{sa}^{ik} - D - j_{sa})}^{l_{sa} - l + 1} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik} + 1} \\
 & \sum_{n_i = n + \mathbb{k}_1}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \\
 & \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
 \end{aligned}$$

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$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik})!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - 1)!} \cdot \sum_{i=0}^{n - (j_{ik} - l_{ik} - D - s)} \sum_{k=0}^{n - j_{sa}^{ik} - (j_{ik} - l_{ik} - D - s)} \sum_{l=0}^n \sum_{m=0}^{(n_i - j_s + 1)} \sum_{k_1=0}^{n + k} \sum_{k_2=0}^{(n_i - j_s + 1)} \sum_{k_3=0}^{(n_i - j_s + 1)} \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^{ik} - n - j^{sa} - s - j_{sa}^{ik} - 2 \cdot k_1 - 2 \cdot k_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^{ik} - n - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot k_1 - 2 \cdot k_2)!} \cdot \frac{1}{(n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$n - l \neq i \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}$$

$$\sum_{n_i=n+\mathbb{k}_1}^n \sum_{(n_i-j_{ik}+1)}^{(n_i-j_{ik}+1)} \sum_{(n_{ik}+j_{ik}-\mathbb{k}_2)}^{(n_{ik}+j_{ik}-\mathbb{k}_2)}$$

$$\sum_{(n_{is}=n+\mathbb{k}_1+j_{sa}^{ik}-j_{ik})}^{(n_{is}=n+\mathbb{k}_1+j_{sa}^{ik}-j_{ik})} \sum_{(n_{sa}=n-j_{sa}+1)}^{(n_{sa}=n-j_{sa}+1)}$$

$$\frac{(n_{is}-n_{ik})}{(j_{ik}-2)! \cdot (n_{is}-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}$$

$$\frac{(n_{is}-n_{sa}-1)!}{(n_{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j_{sa})!}$$

$$\frac{(n_{sa}-1)!}{(n_{sa}-n-1)! \cdot (n-j_{sa})!}$$

$$\frac{(l_{ik}-l-j_{sa}^{ik})!}{(l_{ik}-j_{ik}-l+1)! \cdot (j_{ik}-j_{sa}^{ik}-1)!}$$

$$\frac{(D+j_{sa}-l_{sa}-s)!}{(D+j_{sa}-n-l_{sa})! \cdot (n+j_{sa}-j_{sa}-s)!}$$

$$\sum_{k=l}^{(l_s+j_{sa}^{ik}-l)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{( )}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}$$

$$\frac{1}{(n-s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa})!}$$

$$D \geq n < n \wedge l \neq j \wedge l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge l_i \leq D + s - n \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$fz = \sum_{k=l}^{(l_{sa} + j_{sa}^{ik} - l - j_{sa} + 1)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}} \sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - k_2} \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{j_{sa}^{ik} - l} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n - j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - k_2} \sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa}^{ik} - k_2)}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - j_{sa}^{ik} - 2 \cdot k_2 - 2 \cdot k_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - j_{sa}^{ik} - 2 \cdot k_2 - 2 \cdot k_2)!}$$

$$\frac{1}{(n - s)!}$$

$$\frac{(j_{sa} - l - 1)!}{(j_{sa} + j_{sa}^{ik} - j_{sa}^{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(j_{sa} - l_i)!}{(D + j^{sa} + j_{sa} - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l \neq l_i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa}^{ik} + j_{sa}^{ik} - j_{sa}^{ik} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_{sa} \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq l_i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa}^{ik} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z^{\mathcal{S}^{DOST}}_{j_{ik}, j_{sa}} = \sum_{k=l}^{(j_{sa} + j_{sa}^{ik} - j_{sa})} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1} \sum_{j_{sa} = l_i + j_{sa} - D - s}^{n_{sa} - D - s} \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j_{sa}^{ik} - \mathbb{k}_2}^{n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2} \frac{(n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} - n_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} + \sum_{k=l}^{(l_{ik} - l + 1)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_i + j_{sa} - l - s + 1} \sum_{j_{sa} = l_{ik} + j_{sa} - l - j_{sa}^{ik} + 2}^{n_{sa} - D - s} \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j_{sa}^{ik} - \mathbb{k}_2}^{n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{( )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(l_i+l+n+j_{sa}-D)} \sum_{(j_s+1)} \sum_{(n_{is}+k(n_{is}=n+k+j_{sa}^{ik}-j_{ik}))} \sum_{(n_{is}+j_{sa}^s-j_{sa}^{ik}-k_1)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)} \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot k_1 - 2 \cdot k_2)!}{(2 \cdot n_{is} + 2 \cdot j_{sa}^s + j_{sa} - n_{sa})! \cdot (j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot k_1 - 2 \cdot k_2)!} \cdot \frac{1}{(n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq l_i < n \wedge l \neq l_i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq l_i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz_{j_{sa}}^{SDOST} = \sum_{k=l}^{(l_i+n-j_{sa}^{ik}-D)} \sum_{j_{sa}^{ik}=j_{sa}^{ik}+1}^{(l_i+j_{sa}^{ik}-l-s+1)} \sum_{j_{sa}=l_i+n+j_{sa}-D-s}^{(l_i+n-j_{sa}^{ik}-D)} \frac{(n_{ik}-j_{sa}^{ik}-\mathbb{k}_1+1)! \cdot n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}{n_{ik}+\mathbb{k} (n_{ik}=n_{sa}-j_{ik}+1) \quad n_{sa}=n-j_{sa}+1} \cdot \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} + \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{l_i+j_{sa}-l-s+1} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - 1)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - j_{sa})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} - l_{sa} - j_{sa}^{sa})!}{(j_{ik} + j_{sa} - j_{sa} - l_{ik} - 1)! \cdot (j^{sa} + j_{ik} - j_{sa})!} \cdot \\
 & \frac{(n - j^{sa} - n - s)!}{(n + j^{sa} - n - 1)! \cdot (n - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{(l_{ik}-1)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{j_{sa}^{ik}-D-s} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}}^{( )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{( )} \\
 & \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!} \cdot \\
 & \frac{1}{(n - s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$



$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\sum_{j_{ik}, j_{sa}}^{(n+j_{sa})} \sum_{\mathbb{k}} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)} \sum_{(n+l_{ik}-\mathbb{k}_1+1)}^{(n+l_{ik}-\mathbb{k}_1+1)} \sum_{(n_{ik}=n_{sa}-j_{ik}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{sa}=n-j^{sa}+1)} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(n_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(n_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \sum_{k=l}^{(l_s+j_{sa}^{ik}-l)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_i+j_{sa}-l-s+1} \sum_{j^{sa}=l_s+j_{sa}-l+1}$$

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$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - 1)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - j_{sa})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} - l_{sa} - j_{sa})!}{(j_{ik} + j_{sa} - j_{sa} - l_{ik})! \cdot (j^{sa} - j_{sa}^{ik} - j_{sa})!} \cdot \\
 & \frac{(n_i + j_{sa} - n - s)!}{(n_i + j_{sa} - n - 1)! \cdot (n_i - j_{sa} - s)!} \cdot \\
 & \sum_{k=l}^n \sum_{(j_{sa}^{ik}-j_{sa})}^{(j_{sa}^{ik}-j_{sa})} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_s+j_{sa}-l} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}}^{(n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1})} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \\
 & \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!} \cdot \\
 & \frac{1}{(n - s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz_{j_{sa}}^{SDOST} = \sum_{k=l}^{(l_i+n-j_{sa}^{ik}-D-s)} \sum_{j_{sa}^{ik}=j_{sa}^{ik}+1}^{(l_i+n-j_{sa}^{ik}-D-s)} \sum_{j_{sa}^{ik}=l_i+n+j_{sa}^{ik}-D-s}^{(l_i+n-j_{sa}^{ik}-D-s)} \sum_{n_{ik}=n_{ik}-\mathbb{k}_1+1}^{(n_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}^{ik}+1}^{(n_{ik}+j_{ik}-j_{sa}^{ik}-\mathbb{k}_2)} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(n_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(n_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa}^{ik})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa}^{ik} - n - 1)! \cdot (n - j_{sa}^{ik})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa}^{ik} - l_{ik})! \cdot (j_{sa}^{ik} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa}^{ik} - s)!} + \sum_{k=l}^{(l_s+j_{sa}^{ik}-l)} \sum_{j_{sa}^{ik}=j_{sa}^{ik}-D-s}^{(l_i+j_{sa}^{ik}-l-s+1)} \sum_{j_{sa}^{ik}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{(l_i+j_{sa}^{ik}-l-s+1)}$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - 1)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - j_{sa})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} - l_{sa} - j_{sa}^{sa})!}{(j_{ik} + j_{sa} - j_{sa} - l_{ik} - 1)! \cdot (j^{sa} - j_{sa}^{ik} - j_{sa})!} \cdot \\
 & \frac{(n + j_{sa} - n - s)!}{(n + j_{sa} - n - 1)! \cdot (n - j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{(l_s+j_{sa}-l)} \sum_{(j_{ik} - l + n + j_{sa}^{ik} - D - s)}^{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}}^{( )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \\
 & \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!} \cdot \\
 & \frac{1}{(n - s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned} \sum_{k=l}^{D+s} \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(l_{ik}-l-j_{sa}^{ik}+1)} \sum_{j_{sa}=j_{sa}+1}^{(n_{sa}-j_{sa}+1)} & \frac{(n_{ik}-j_{ik}-\mathbb{k}_1+1)! \cdot (n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)!}{(n_i-n_{ik}-\mathbb{k}_1-1)!} \\ \cdot \frac{(n_{ik}-2)! \cdot (n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}{(n_{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa})!} & \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-n-1)! \cdot (n-j^{sa})!} \\ \cdot \frac{(l_{ik}-l-j_{sa}^{ik})!}{(l_{ik}-j_{ik}-l+1)! \cdot (j_{ik}-j_{sa}^{ik}-1)!} & \cdot \frac{(D+j_{sa}-l_{sa}-s)!}{(D+j^{sa}-n-l_{sa})! \cdot (n+j_{sa}-j^{sa}-s)!} \end{aligned}$$

$$\sum_{k=l}^{D+s} \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(l_{ik}+j_{sa}-l-j_{sa}^{ik}+1)} \sum_{j_{sa}=j_{sa}+1}^{(n_{sa}-j_{sa}+1)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{lk}-\mathbb{k}_1} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}^{(\quad)}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}$$

$$\frac{\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - \mathbb{k}_1 - 1)!}}{(D - l)!} \cdot \frac{(n - l)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n_{ik} + j_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} + j_{sa} - s > 0 \wedge$$

$$D + s - n < l_i \leq D + l_{sa} + j_{sa} - n - j_{sa} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{ik} < j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z^{S_{j_{ik}, j_{sa}^{DOST}}} = \sum_{k=l}^{(\quad)} \sum_{(j_{ik}=j^{sa}+j_{sa}^{lk}-j_{sa})}^{(\quad)} \sum_{j^{sa}=j_{sa}+1}^{l_{ik}+j_{sa}-l-j_{sa}^{lk}+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{\binom{l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1}{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}^{sa} = l_i + n + j_{sa} - D - s}} \sum_{n_i = n + \mathbb{k}}^{\binom{n_i}{n_i = n + \mathbb{k}}}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - j^{sa} - s - \mathbb{k} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{sa}^s - n_{sa} - j^{sa} - n - j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!} \cdot \frac{1}{(n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n \wedge l \neq i \wedge l \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} \wedge$$

$$j_{ik} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + l = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$s \geq 5 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - 1)! \cdot (n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l_{sa}^{ik})!}{(l_{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

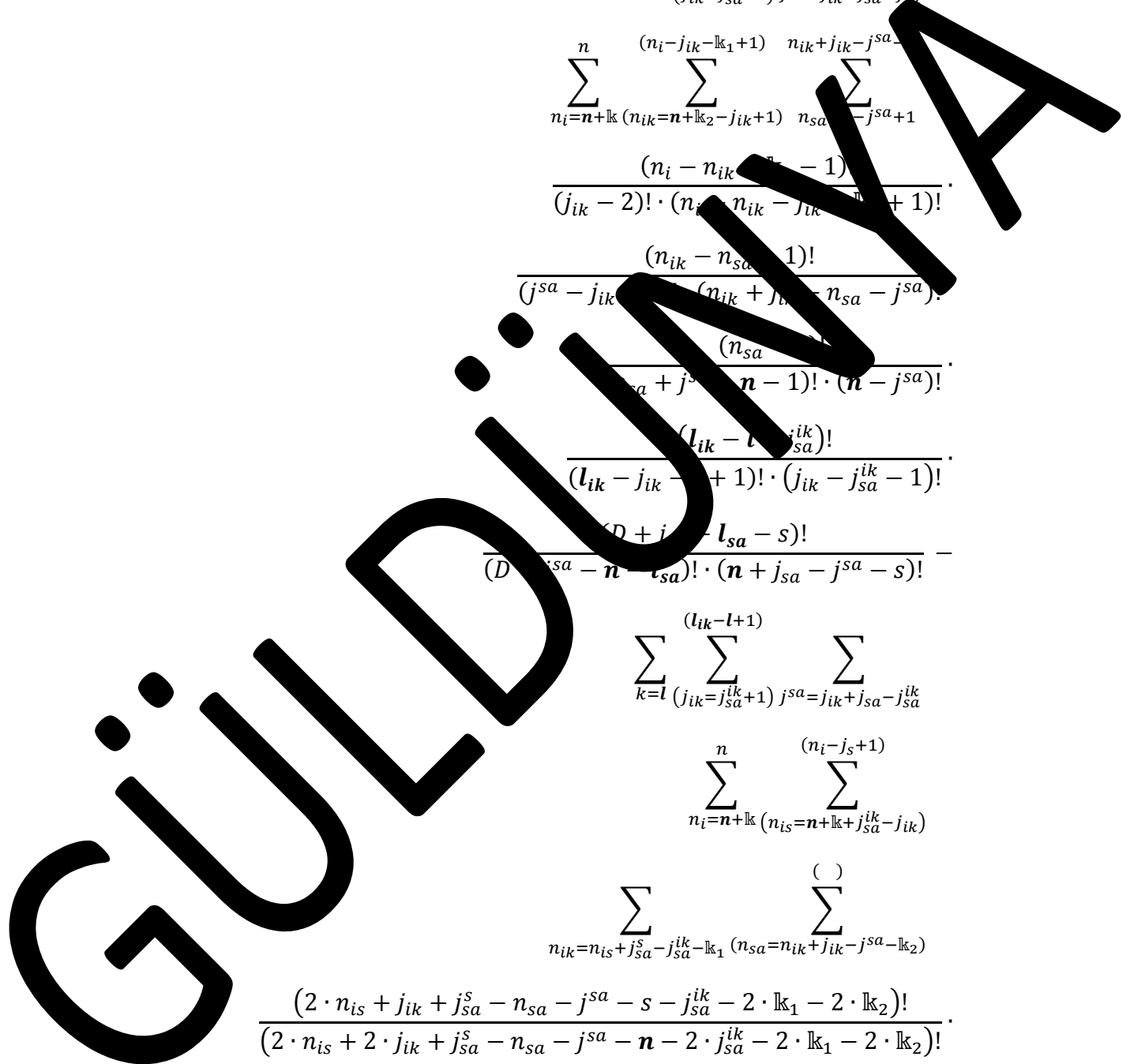
$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{( )}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}$$

$$\frac{1}{(n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$





$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_{z \sim j_{sa}^{ST}} = \sum_{k=l}^{(l_{ik}-l+1)} \sum_{k=j_{sa}^{ik}+1}^{n} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{n_{ik}+j_{ik}-j^{sa}-k_2} \sum_{n_{sa}=n-j^{sa}+1}^{(n_i-j_{ik}-k_1+1)} \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{n} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{n}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}$$

$$\frac{1}{(s-1)!}$$

$$\frac{(l_s - 1)!}{(l_s + j_{ik} - l)! (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D - l_i + s - 1)! (l_i - j_{sa}^{ik} - 1)! (n + j_{sa} - j^{sa} - s)!}$$

- $D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1$
- $j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$
- $j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$
- $l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_{sa} + j_{sa} - s > l_{sa} \wedge$
- $D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$
- $D \geq n < n = \mathbb{k} > 1 \wedge$
- $j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^i = j_{sa} - 1 \wedge j_{sa}^{ik} \leq j_{sa}^{ik} - 1 \wedge$
- $s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i, \dots, j_{sa}^i\} \wedge$
- $s \geq 5 \wedge s = 1 + \mathbb{k} \wedge$
- $\mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz S_{j_{ik} j_{sa}}^{DOST} = \sum_{k=l}^{(l_{sa}+j_{sa}^{ik}-l-j_{sa}+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + j_{sa} - l_{sa})!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa})!}$$

$$\sum_{l_i=1}^{(l_{ik}-l+1)} \sum_{j_{sa}^{ik}=D-l_i}^{(j_{ik}-l_i)} \sum_{j_{sa}^{ik}=j_{sa}^{ik}}^{(n_{sa}-j_{sa}^{ik})}$$

$$\sum_{k=n+l_i}^{(n_i-j_s+1)} \sum_{(n_{is}=n+k+j_{sa}^{ik}-j_{ik})}$$

$$\sum_{(k=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1)}^{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(2 \cdot n_{is} + j_{ik} - j_{sa}^s - n_{sa})! \cdot (j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - 1)! \cdot (j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}$$

$$\frac{1}{(n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n - n) \wedge l \neq i) \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l \neq i_l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(j^{sa} + j_{sa}^{ik} - j_{sa})} \sum_{(j_{sa}^{ik} + 1)}^{l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1} \sum_{j_{sa} = j_{sa} + 1}^{(j^{sa} + j_{sa}^{ik} - j_{sa})} \sum_{(n_i - j_{sa}^{ik} - \mathbb{k}_1 + 1)}^{(n_i - j_{sa}^{ik} - \mathbb{k}_1 + 1)} \sum_{(n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)}^{n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2} \sum_{(n_{sa} = n - j_{sa} + 1)}^{n_{sa} = n - j_{sa} + 1} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\begin{aligned}
& \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_{sa}-l+1} j^{sa=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}^{ik}}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
& \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_i + j^{sa} - n - 1)! \cdot (n - j^{sa})!}{(n_i - j_{ik} - l_{k_1} - 1)! \cdot (j_{ik} - j_{sa} - 1)!} \cdot \\
& \frac{(l_{sa} + j_{ik} - l_{ik} - j_{sa})!}{(j_{ik} + j_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(D + j^{sa} - l_{sa} - s)!}{(D + j^{sa} - l_{sa} - s)! \cdot (n + j_{sa} - j^{sa} - s)!} \\
& \sum_{k=l}^{( )} \sum_{(j_{ik}=j_{sa}^{ik}+j_{sa}^{ik}-j_{sa})}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{j^{sa}=j_{sa}^{ik}+1} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}}^{( )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \\
& \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!} \cdot \\
& \frac{1}{(n - s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
\end{aligned}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\left( (D \geq n < n \wedge l \neq i, l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l \neq i, l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - j_{sa}^i + 1 \wedge j_{sa}^i < j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + 1 \wedge$$

$$\mathbb{k}_1 : z = 2 \wedge \mathbb{k}_2 = \mathbb{k}_1 + 1 \Rightarrow$$

$$fz S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_{sa}-l+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_{ik}=n+\mathbb{k}_1}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}$$

$$\sum_{(n=n+l_k)} \sum_{(n_{ik}+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s)}$$

$$\sum_{(n_{ik}=n_{is}+j_{sa}^{ik}-l_{k_1})} \sum_{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - l_{k_1} - j^{sa} - s - l_{k_1} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!}{(2 \cdot n_{is} + 2 \cdot j_{sa}^{ik} - n_{sa} - j^{sa} - n - j_{sa}^{ik} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!}$$

$$\frac{1}{(n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$(D \geq n < n \wedge l \neq l_i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$j_{sa}^{ik} - j_{sa}^{ik} = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq l_i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z^{S_{j_{ik}, j_{sa}^{ik}}} = \sum_{l=1}^{(j_{sa}^{ik} - j_{sa})} \sum_{\substack{n_i = n + \mathbb{k} \\ (n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}}^{(j_{sa}^{ik} - j_{sa})} \sum_{\substack{n_{sa} = l_{sa} + n - D \\ (n_{sa} = n - j_{sa} + 1)}}^{(j_{sa}^{ik} - j_{sa})} \sum_{\substack{n_{sa} = n - j_{sa} + 1 \\ (n_{sa} = n - j_{sa} + 1)}}^{(j_{sa}^{ik} - j_{sa})} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(n_i - j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{sa} - n_{sa} - 1)!}{(n_{sa} - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n - 1)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} + \sum_{k=l}^{(l_{ik} - l + 1)} \sum_{\substack{(j_{ik} = j_{sa}^{ik} + 1) \\ (n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}}^{(l_{sa} - l + 1)} \sum_{\substack{(j_{sa} = l_{ik} + j_{sa} - l - j_{sa}^{ik} + 2) \\ (n_{sa} = n - j_{sa} + 1)}}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{\substack{(n_{sa} = n - j_{sa} + 1) \\ (n_{sa} = n - j_{sa} + 1)}}^{(n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)}$$



$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa}^{ik})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - l_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - 1)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{( )} \sum_{(j_{ik}=j_{sa}^{ik}-j_{sa})}^{( )} \sum_{(l_{ik}+j_{sa}^{ik})}^{( )} \sum_{(n_i+n+j_{sa}-D-s)}^{( )} \sum_{(n_i=n+l_k)}^{( )} \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{( )}$$

$$\sum_{(n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1)}^{( )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{( )}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}$$

$$\frac{1}{(n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^l\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_{z=1}^{ST} = \sum_{k=l}^{(l_{sa}+n+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_{sa}-l+1} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-l+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-k_2}$$

$$\frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\begin{aligned}
 & \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})}^{(l_{sa}-l+1)} j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}^{ik}}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \\
 & \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_i + j^{sa} - n - 1)! \cdot (n - j^{sa} - 1)!}{(n_i - j_{ik} - l_{k_1} + 1)! \cdot (j_{ik} - j_{sa} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + j_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - l_{sa} - s)! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(l_{sa}-l+1)} j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}}^{(\quad)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{(\quad)} \\
 & \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!} \cdot \\
 & \frac{1}{(n - s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}
 \end{aligned}$$

GÜLDÜZMAYA

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\left( (D \geq n < n \wedge l \neq i, l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l \neq i, l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$l_{sa} \leq D + j_{sa} - n \wedge l_i \leq D + s - n))$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - j_{sa}^i + 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^s\} \wedge$$

$$s \geq 5 \wedge s = s + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k}_z = \mathbb{k}_1 + 1 \Rightarrow$$

$$f_z S_{j_{ik}, j^{sa}}^{DOST} = \sum_{k=l}^{(j^{sa} + j_{sa}^{ik} - j_{sa})} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1} \sum_{j^{sa} = j_{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \\ \sum_{n_i = n + \mathbb{k}_1}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \\ \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\ \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\ \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_{sa}+1} \sum_{(j_{sa}=j_{sa}^{ik}+2)}^{l_{sa}+1}$$

$$\sum_{n_i=n+l_{ik}}^n \sum_{(n_{ik}=j_{ik}+1)}^{(n_i-j_{ik}+1)} \sum_{(n_{sa}=n-j_{sa}+1)}^{(n_{ik}+j_{ik}-l_{k2})}$$

$$\frac{(n_{ik} - j_{ik} - l_{k1} + 1)!}{(j_{ik} - l_{k1} + 1)! \cdot (n_{ik} - j_{ik} - l_{k1} + 1)!}$$

$$\frac{(n_{sa} - j_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(j_{sa} - n - 1)! \cdot (n - j_{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

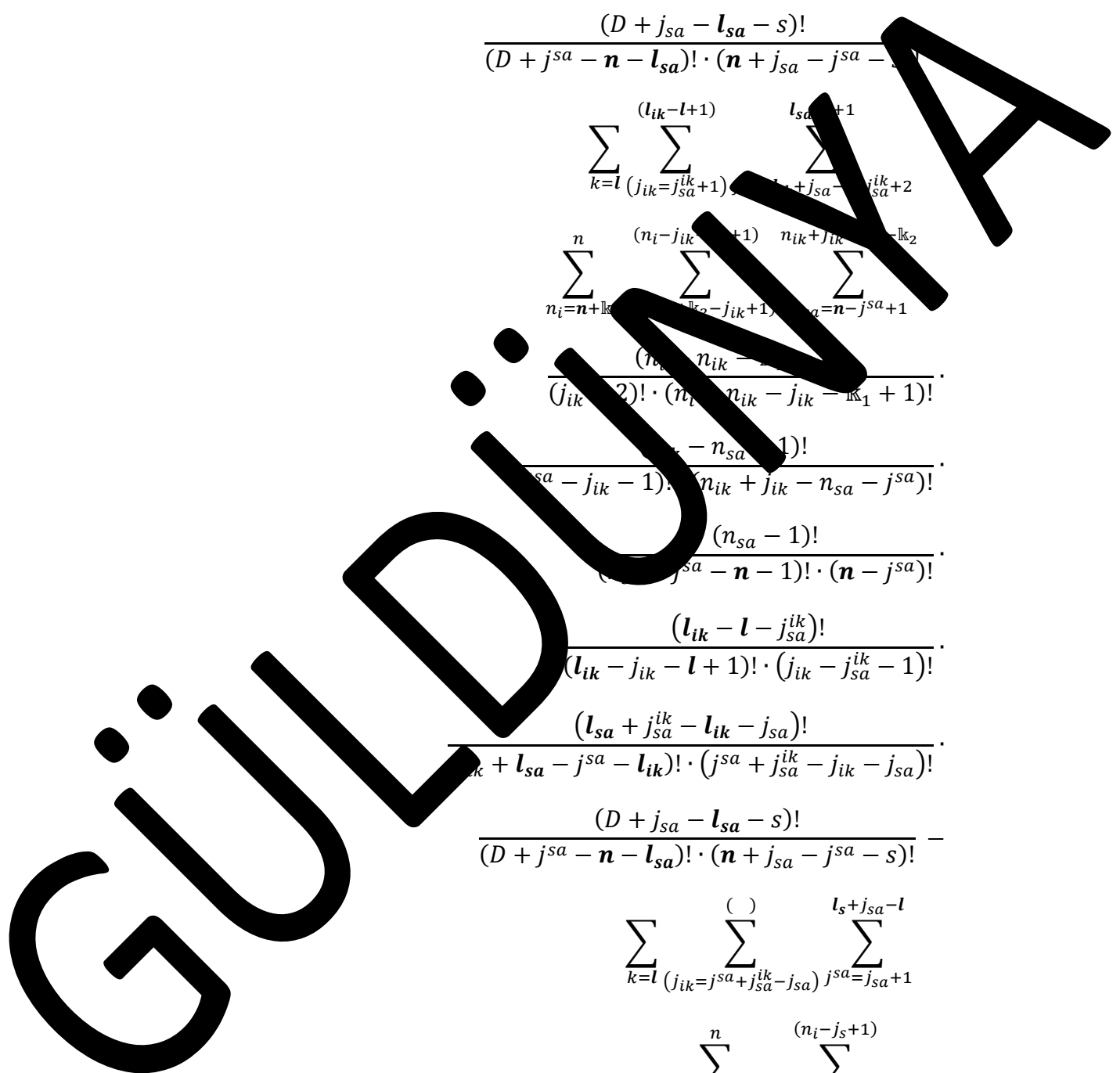
$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{( )} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})}^{( )} \sum_{j_{sa}=j_{sa}+1}^{l_s+j_{sa}-l}$$

$$\sum_{n_i=n+l_{ik}}^n \sum_{(n_{is}=n+l_{ik}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}-l_{k1}} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-l_{k2})}^{( )}$$



$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!} \cdot \frac{1}{(n-s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_{sa} \leq D + j_{sa} - n \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\}$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z^{S^{DO}}_{j_{ik}, j^{sa}} = \left( \sum_{k=l} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{j^{sa}=j_{sa}+1}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \right) \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\left( \sum_{k=l}^{j^{sa} + j_{sa}^{ik} - j_{sa} - 1} \sum_{(j_{ik} = j_{sa}^{ik} + 1)} \sum_{j^{sa} = j_{sa} + 2}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_{ik} - l_{sa} - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(j_{ik} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l}^{(l_{ik} - l + 1)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)} \sum_{j^{sa} = l_{ik} + j_{sa} - l - j_{sa}^{ik} + 2}^{l_{sa} - l + 1}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)}$$

$$\sum_{k=l}^{( )} \sum_{(j_{ik}=j^{sa} \dots)} \sum_{(j^{sa}+j_{sa}^{ik}-l)} \dots$$

$$\sum_{(n_i-j_s)} \sum_{(n_i+l_k+j_{sa}^{ik}-j_{ik})} \dots$$

$$\sum_{(n_{ik}=n_{is}+j_{sa}^{ik}-l_{k_1})} \sum_{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \dots$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!}{(2 \cdot n_{is} + 2 \cdot n_{sa} - n_{sa} - j^{sa} - n - j_{sa}^{ik} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!}$$

$$\frac{1}{(n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)}$$

$$D \geq n < n \wedge l \neq i \wedge l \leq D + j_{sa} - n \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa}^{ik} - 1 \wedge j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, l_{k_2}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$



$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j^{sa}}^{DOST} = \left( \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(l_{ik}-l+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \right. \\ \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\ \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \\ \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \\ \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \\ \left. \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \right) + \\ \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\ \left( \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(l_{ik}-l+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{l_{sa}-l+1} \right. \\ \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\ \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \\ \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \\ \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \\ \left. \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \right) \\ \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\left( \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) -$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n - k - j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^{ik} - j_{sa}^{ik} - k_1} \sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa}^{ik})}^{(n_{ik} - j_s + 1)}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - j_{sa}^{ik} - 2 \cdot k_1 - 2 \cdot k_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n_{sa} - 2 \cdot j_{sa}^{ik} - 2 \cdot k_1 - 2 \cdot k_2)!} \cdot \frac{1}{(n - s)!}$$

$$\frac{(n_{ik} - l - 1)! \cdot (j_{ik} + j_{sa} - j_{sa}^{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}{(D + j^{sa} + n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l_i \neq l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge l_{sa} - j_{sa} - j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l_i \neq l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$l_{sa} \leq D + j_{sa} - n \wedge l_i \leq D + s - n)) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$fz_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_{sa}-l+1} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{n_{ik}+j_{ik}-j_{sa}-k_2} \sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j_{sa}^{ik}}^{(n_{sa}+j_{sa}-j_{sa}^{ik})} \frac{(j_{ik}-2)! \cdot (n_{ik}-j_{ik}-k_1+1)!}{(j_{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j_{sa})!} \cdot \frac{(n_{ik}-n_{sa}-1)!}{(n_{sa}+j_{sa}-n-1)! \cdot (n-j_{sa})!} \cdot \frac{(n_{sa}-1)!}{(l_{ik}-l-j_{sa}^{ik})!} \cdot \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(l_{ik}-j_{ik}-l+1)! \cdot (j_{ik}-j_{sa}^{ik}-1)!} \cdot \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(l_{sa}+j_{sa}-j_{sa}-l_{ik})! \cdot (j_{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot \frac{(D+j_{sa}-l_{sa}-s)!}{(D+j_{sa}-n-l_{sa})! \cdot (n+j_{sa}-j_{sa}-s)!}$$

$$\sum_{k=l}^{(l_s+j_{sa}^{ik}-l)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-k_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-k_2)}^{( )}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!} \cdot \frac{1}{(n-s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - l)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$

$2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$

$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$

$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\}$

$s \geq 5 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_2 \cdot z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \left( \sum_{k=l} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(j^{sa}=l_{sa}+n-D)} \sum_{(l_{ik}+j_{sa}-l-j_{sa}^{ik}+1)} \sum_{(n_i=n+\mathbb{k})} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)} \sum_{(n_{sa}=n-j^{sa}+1)} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \right)$$

$$\begin{aligned}
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \left( \sum_{k=l}^{(j^{sa} + j_{sa}^{ik} - j_{sa} - 1)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1} \sum_{j_{sa} = l_{sa} - n - D}^{n - D} \right) \cdot \\
 & \sum_{n_i = n + \mathbb{k}_1}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 - 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \\
 & \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{k=l}^{(l_{ik} - l + 1)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{sa} - l + 1} \sum_{j_{sa} = l_{sa} + j_{sa} - l - j_{sa}^{ik} + 2}^{l_{sa} - l + 1} \\
 & \sum_{n_i = n + \mathbb{k}_1}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \\
 & \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
 \end{aligned}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - l)!} \cdot$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - l_{sa} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - 1)!} \cdot$$

$$\sum_{j_{ik}=j_{sa}^{ik}-j_{sa}}^{l_s+j_{sa}-l} \binom{l_s+j_{sa}-l}{j_{ik}-j_{sa}^{ik}-j_{sa}} \cdot \binom{l_s+j_{sa}-l}{j_{ik}-j_{sa}^{ik}-j_{sa}} \cdot (n_{is}-D-s)$$

$$\sum_{n=n+l_k}^{n_{is}+j_{sa}^{ik}-j_{sa}} \sum_{n_{is}=n+l_k+j_{sa}^{ik}-j_{sa}}^{(n_{is}-j_s+1)}$$

$$\sum_{k=n_{is}+j_{sa}^s-j_{sa}^{ik}-k_1}^{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)} \binom{()}{k}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^{ik} - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot k_1 - 2 \cdot k_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^{ik} - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot k_1 - 2 \cdot k_2)!} \cdot$$

$$\frac{1}{(n - s)!} \cdot$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

- $n > n < n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$
- $2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$
- $j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$
- $j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$
- $l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z^{DOST} S_{j_{ik} j_{sa}} = \left( \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-j_{sa})} j_{sa}^{sa=j_{ik}+j_{sa}^{ik}-j_{sa}^{sa}} \right. \\ \sum_{n=n+l+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-k_2} \\ \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \\ \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \\ \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \\ \left. \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \right) + \\ \left( \sum_{k=l}^{(l_{sa}+n+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_{sa}-l+1} \sum_{j_{sa}=l_{sa}+n-D} \right. \\ \sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-k_2} \\ \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \\ \left. \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \right)$$

$$\begin{aligned}
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})}^{(j_{ik}-l)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(j_{ik}-l)} \cdot \\
 & \sum_{n_i=n}^n \sum_{(n_{ik}=n+l_{ik}+j_{ik}+1)}^{(n_{ik}-j_{sa}-l_{k_2})} \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{sa}-j_{sa}-l_{k_1})} \cdot \\
 & \frac{(n_{ik} - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_{ik} - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(n_{sa} - j_{ik} - n_{ik} - j_{sa} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) - \\
 & \sum_{k=l}^{(l_s+j_{sa}^{ik}-l)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(l_s+j_{sa}^{ik}-l)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{(l_s+j_{sa}^{ik}-l)} \cdot \\
 & \sum_{n_i=n+l_{k_1}}^n \sum_{(n_{is}=n+l_{k_1}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}
 \end{aligned}$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{lk}-\mathbb{k}_1} \sum_{\binom{()}{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}$$

$$\frac{\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - \mathbb{k}_1 - 1)!}}{(D - l)!} \cdot \frac{(n - l)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n_{sa} + j_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} + j_{sa} - s = l_s \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_{sa} - j_{sa}^{ik} - n + 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{lk} = j_{sa} - 1 \wedge j_{sa}^{ik} < j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + 1 \Rightarrow$$

$$f_z^{SDOST} S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_{ik}+n-D)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \sum_{n_{ik}=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{j_{ik}=l_{ik} + n_{is} - j_{sa}^{ik}}^{j_{sa}^{ik} - l} \sum_{j_{sa}^{ik}=j_{ik} - j_{sa}^{ik}}^{j_{sa}^{ik} - l} \sum_{n_i=n+l_k}^{(n_{is} + j_{sa}^{ik} - j_{ik})} \sum_{n_{ik}=n+l_k}^{(n_{is} + j_{sa}^{ik} - j_{ik})} \sum_{j_{sa}^{ik}-l_{k_1}}^{j_{sa}^{ik}-l_{k_1}} \sum_{n_{ik}+j_{ik}-j^{sa}-l_{k_2}}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - j^{sa} - s - l_{k_1} - 2 \cdot l_{k_2})!}{(2 \cdot n_{is} + 2 \cdot j_{sa}^{ik} - n_{sa} - j_{sa}^{ik} - n - j_{sa}^{ik} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!} \cdot \frac{1}{(n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n \wedge l \neq i \wedge l \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa}^{ik} \wedge$$

$$j_{ik} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, l_{k_2}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j^{sa}}^{DOST} = \sum_{k=l} \sum_{\binom{()}{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_i+j_{sa}-l-s+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{\binom{(n_i-j_{ik}-\mathbb{k}_1+1)}{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j^{sa}}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l_{sa}^{ik})!}{(l_{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l} \sum_{\binom{()}{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}} \sum_{j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}^{l_s+j_{sa}-l}$$

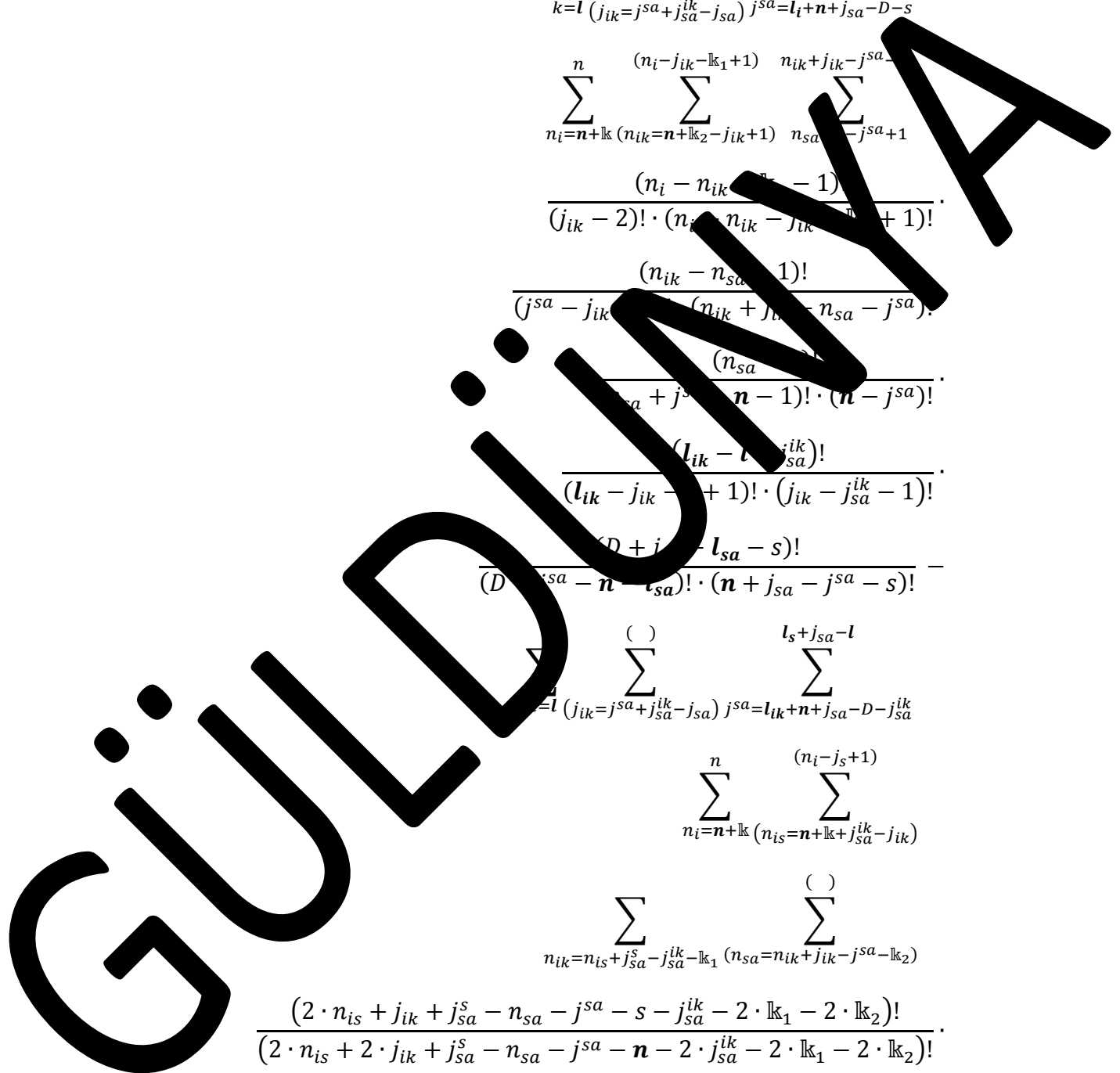
$$\sum_{n_i=n+\mathbb{k}}^n \sum_{\binom{(n_i-j_s+1)}{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{\binom{()}{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}$$

$$\frac{1}{(n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$



$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$\begin{aligned} & \sum_{k=l}^{(l_i + j_{sa}^{ik} - s + 1)} \sum_{j_{sa}^{ik} = j_{ik} + j_{sa} - j_{sa}^{ik}}^{j_{sa}^{ik} - D - s} \sum_{j_{sa}^{ik} = j_{ik} + j_{sa} - j_{sa}^{ik}}^{j_{sa}^{ik} - D - s} \\ & \sum_{i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik} + j_{ik} - j_{sa} - k_2} \\ & \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \\ & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\ & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\ & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\ & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\ & \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik}=l_{ik}+n-D)} \sum_{j_{sa}^{ik} = j_{ik} + j_{sa} - j_{sa}^{ik}} \end{aligned}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}$$

$$\frac{1}{(n-s)!}$$

$$\frac{(l_s - 1)!}{(l_s + j_{ik} - l)! (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + l_i)!}{(D + j_{sa} + s - l_i - j_{sa}^{ik} + 1) (n + j_{sa} - j^{sa} - s)!}$$

- $D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1$
- $j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$
- $j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$
- $l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_{sa} + j_{sa} - s = l_{sa} \wedge$
- $D + j_{sa} - n < l_s \leq D + l_s + j_{sa} - n - 1 \wedge$
- $D \geq n < n - l = \mathbb{k} > 0 \wedge$
- $j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{ik} \leq j_{sa}^{ik} - 1 \wedge$
- $s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i, \dots, j_{sa}^i\} \wedge$
- $s \geq 5 \wedge s = n + \mathbb{k} \wedge$
- $\mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_z S_{j_{ik} j_{sa}}^{DOST} = \sum_{k=l}^{(j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(j_{ik}=l_{ik}+n-D)} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik})} \sum_{j_{ik}=j_{sa}^{ik}+n-D}^{l_{ik}-l-j_{sa}^{ik}-1} \sum_{j_{sa}^{ik}=j_{sa}^{ik}-l-j_{sa}^{ik}+2}^{l_{ik}-l-j_{sa}^{ik}-1}$$

$$\sum_{n_i=n+l_{sa}+j_{sa}^{ik}+l_{ik}+l_{sa}+j_{sa}^{ik}-j_{ik}+1}^n \sum_{n_{sa}=n-j^{sa}+1}^{(n_i-j_{ik}-\mathbb{k}_1+1) \cdot (n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

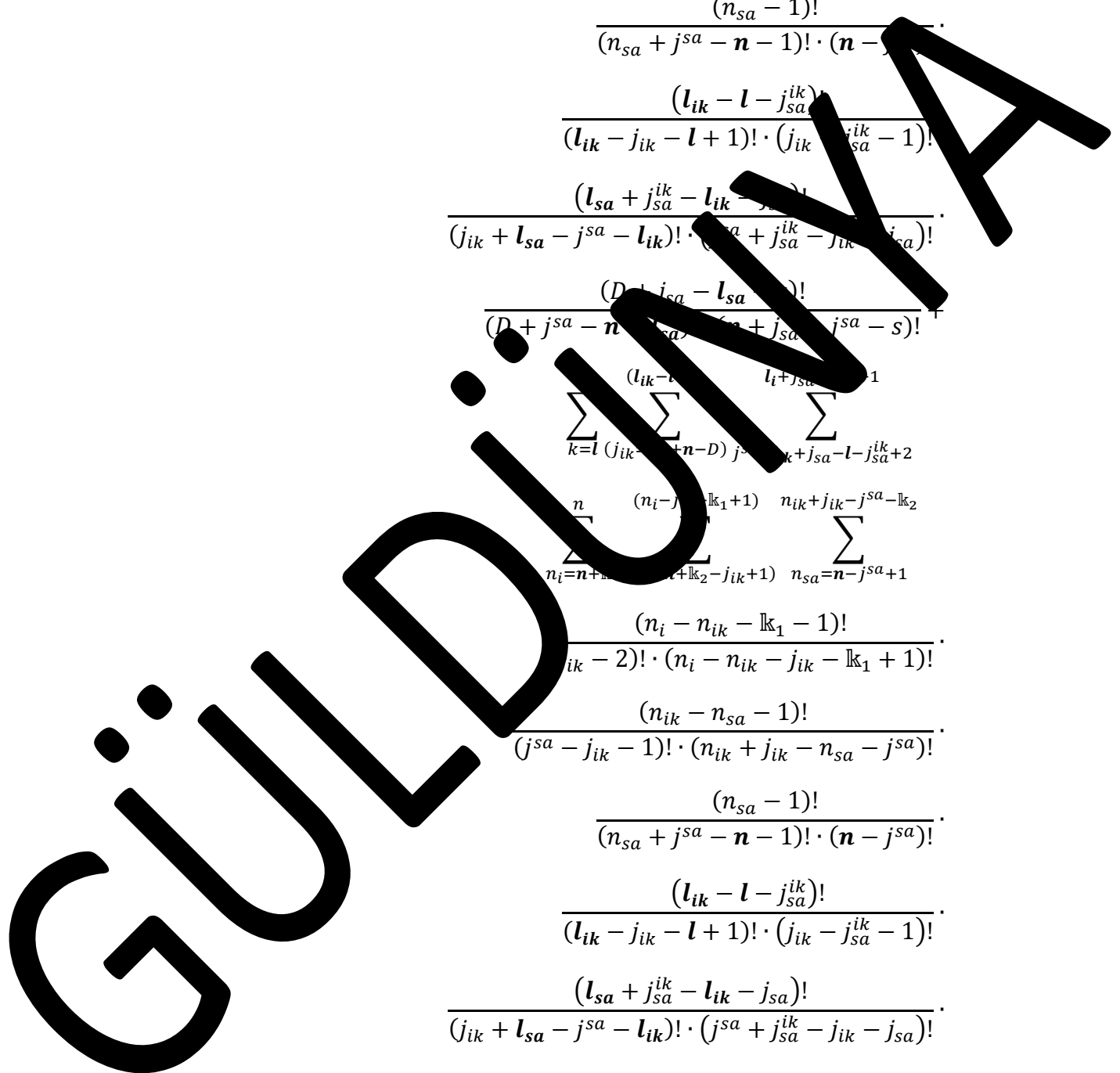
$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{( )} \sum_{j_{ik}=j_{sa}^{ik}+j_{sa}^{ik}-j_{sa}}^{( )} \sum_{j_{sa}^{ik}=l_{sa}+n-D}^{l_{sa}+j_{sa}^{ik}-l}$$



$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}$$

$$\frac{1}{(n-s)!}$$

$$\frac{(l_s - 1)!}{(l_s + j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + l_i)!}{(D + j_{sa} + s - l_i - j_{sa}^{ik} + 1) \cdot (n + j_{sa} - j^{sa} - s)!}$$

- $D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1$
- $j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$
- $j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$
- $l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_{sa} + j_{sa} - s = l_{sa} \wedge$
- $D + j_{sa} - n < l_s \leq D + l_s + j_{sa} - n - 1 \wedge$
- $D \geq n < n - \mathbb{k} = \mathbb{k} > 0 \wedge$
- $j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - j_{sa}^{ik} \leq j_{sa}^{ik} - 1 \wedge$
- $s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i, \dots, j_{sa}^i\} \wedge$
- $s \geq 5 \wedge s = \mathbb{k}_1 + \mathbb{k}_2 \wedge$
- $\mathbb{k}_1 \wedge \mathbb{k}_2 = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_i+n+j_{sa}^{ik}-D-s-1)} \sum_{(j_{ik}=l_{ik}+n-D)} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_i+j_{sa}-l-s+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_{ik}-1)} \sum_{(j_{ik}=l_{ik}+j_{sa}^{ik}-D-j_{sa})}^{l_{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{l_{ik}-1} \dots$$

$$\sum_{n_i=n+\mathbb{k}_1}^n \sum_{(n_i-j_{ik}-\mathbb{k}_1+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{sa}=n-j^{sa}+1)} \dots$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

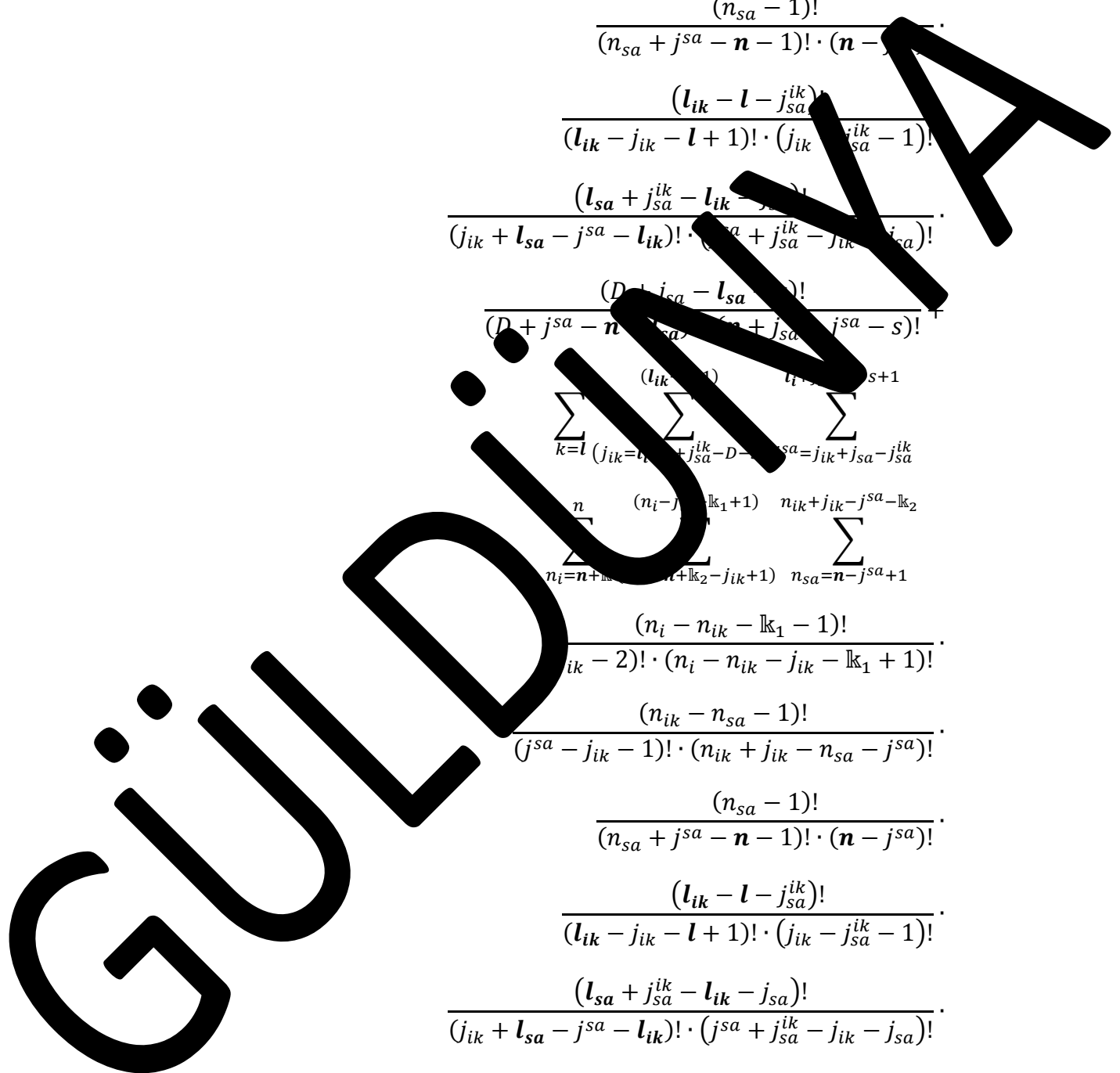
$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_s+j_{sa}^{ik}-l)} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})}^{(l_s+j_{sa}^{ik}-l)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_s+j_{sa}^{ik}-l)}$$





$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{sa}-\mathbb{k}_2)}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}$$

$$\frac{1}{(s)!}$$

$$\frac{(l_s - 1)!}{(l_s + j_{ik} - l)!}$$

$$\frac{(l_i - j_{sa} + s - 1)!}{(D + l_i)!}$$

$$\frac{(n + j_{sa} - j^{sa} - s)!}{(D + s - 1)!}$$

$$((D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1) \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_{sa} + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n) \wedge$$

$$((D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1) \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge l_i \leq D + s - n)) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
 f_{j_{ik}, j_{sa}}^{DOST} &= \sum_{k=l} \sum_{\binom{()}{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}} \sum_{j_{sa}=j_{sa}+1}^{l_{sa}-l+1} \\
 &\sum_{n_i=n+l_k}^n \sum_{\binom{(n_i-j_{ik}-l_{k_1}+1)}{(n_{ik}=n+l_{k_2}-j_{ik}+1)}} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-l_{k_2}} \\
 &\frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
 &\frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j_{sa} - 1)!} \cdot \\
 &\frac{(n_i + j_{sa} - n - 1)! \cdot (n - j_{sa} - 1)!}{(l_{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa} - 1)!} \cdot \\
 &\frac{(D - j_{sa} - l_{sa} - s)!}{(D - j_{sa} - n - l_{sa} - s)! \cdot (n + j_{sa} - j_{sa} - s)!} \cdot \\
 &\sum_{k=l} \sum_{\binom{()}{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}} \sum_{j_{sa}=j_{sa}+1}^{l_s+j_{sa}-l} \\
 &\sum_{n_i=n+l_k}^n \sum_{\binom{(n_i-j_s+1)}{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}} \\
 &\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}} \sum_{\binom{()}{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-l_{k_2})}} \\
 &\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - s - j_{sa}^{ik} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!} \cdot \\
 &\frac{1}{(n - s)!} \cdot \\
 &\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 &\frac{(D - l_i)!}{(D + j_{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}
 \end{aligned}$$

GÜLDENYA

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_{sa} + s - n - j_{sa} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_{z}^{DOST} S_{j_{ik}, j_{sa}}^{j_{sa}^{ik}} = \sum_{k=0}^{j_{sa}^{ik}-j_{sa}} \sum_{j_{sa}^{ik}-j_{sa}+k}^{j_{sa}^{ik}-l+1} \sum_{j_{sa}^{ik}-j_{sa}+k}^{j_{sa}^{ik}-l+1} j_{sa}^{sa} = j_{sa}^{sa} + 1$$

$$\sum_{n_i=n+k}^n \sum_{n_{ik}=n+k_2-j_{ik}+1}^{(n_i-j_{ik})-k_1+1} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-k_2} (n_i - n_{ik} - k_1 - 1)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)! \cdot (n_{ik} - n_{sa} - 1)! \cdot (j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})! \cdot (n_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})! \cdot (l_{ik} - l - j_{sa}^{ik})! \cdot (l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)! \cdot (D + j_{sa} - l_{sa} - s)! \cdot (D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)! \cdot \sum_{k=l}^{j_{sa}^{ik}-j_{sa}} \sum_{j_{sa}^{ik}-j_{sa}+k}^{j_{sa}^{ik}-l+1} \sum_{j_{sa}^{ik}-j_{sa}+k}^{l_s+j_{sa}-l} j_{sa}^{sa} = l_i + n + j_{sa} - D - s$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik})}^{()}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}$$

$$\frac{1}{(s)!}$$

$$\frac{(l_s - 1)!}{(l_s + j_{ik} - l)!} \frac{(j_{ik} - j_{sa}^{ik} - 1)!}{(D + l_i)!}$$

$$\frac{(D + j_{sa}^s + s - 1)!}{(D + l_i - j_{sa}^{ik} + j_{sa}^{ik} - 1)!} \frac{(n + j_{sa}^s - j^{sa} - s)!}{(n + j_{sa}^s - j^{sa} - s)!}$$

$((D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1) \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$

$D + j_{ik} - n < l_{ik} \wedge (D + l_s + j_{sa}^{ik} - n - 1)$

$((D \geq n < n) \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$D + j_{ik} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$

$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 5 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$\begin{aligned}
f_Z S_{j_{ik}, j^{sa}}^{DOST} &= \sum_{k=l}^{(l_{sa} + j_{sa}^{ik} - l - j_{sa} + 1)} \sum_{(j_{ik} = l_{sa} + n + j_{sa}^{ik} - D - j_{sa})} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}} \\
&\sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j^{sa}}^{n_{ik} + j_{ik} - j^{sa} - k_2} \\
&\frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \\
&\frac{(n_i - 1)!}{(n_i + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(j_{ik} - 1)!}{(n_i - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \\
&\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa} - s)! \cdot (n + j_{sa} - j^{sa} - s)!} \\
&\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}} \\
&\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)} \\
&\sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - k_1}^{(\quad)} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - k_2)}^{(\quad)} \\
&\frac{(n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot k_1 - 2 \cdot k_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot k_1 - 2 \cdot k_2)!} \\
&\frac{1}{(n - s)!} \\
&\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \\
&\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
\end{aligned}$$

$$\left( (D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D + s - n < l_i \leq D + l_{sa} + s - n - j_{sa}) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s - l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z \geq 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned} f_z S_{j_{ik}, j_{sa}}^{DOST} &= \sum_{k=l}^{(j^{sa} + j_{sa}^{ik} - j_{sa})} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_s + j_{sa} - l} \sum_{j^{sa} = l_{sa} + n - D} \\ &\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \\ &\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\ &\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\ &\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \end{aligned}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{j_{sa}^{ik} = l_s + j_{sa} - l + 1}$$

$$\sum_{n_i = n + k_1}^n \sum_{n_{ik} = j_{ik} + 1}^{(n_i - j_{ik} - 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{ik} + j_{ik} - k_2}$$

$$\frac{(n_{ik} - n_{sa} - k_1)!}{(j_{ik} - 1)! \cdot (n_{ik} - n_{sa} - j_{ik} - k_1 + 1)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} - j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{( )} \sum_{(j_{ik} = j_{sa}^{ik} + j_{sa}^{ik} - j_{sa})}^{l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1} \sum_{j^{sa} = l_i + n + j_{sa} - D - s}$$

$$\sum_{n_i = n + k_1}^n \sum_{(n_{is} = n + k_1 + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^{ik} - j_{sa}^{ik} - k_1} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - k_2)}^{( )}$$

GÜLDÜŞMÜŞA

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!} \cdot \frac{1}{(n-s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - l)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D + s - n < l_i \leq D + l_{sa} + s - n - j_{sa})$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - (l - 1)) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 1 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^i, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = \mathbb{k} + \mathbb{k} \wedge$$

$$\mathbb{k}_2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{sa} + n + j_{sa}^{ik} - D - j_{sa} - 1)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{sa} - l + 1} \sum_{j^{sa} = l_{sa} + n - D}$$



$$\begin{aligned}
& \sum_{n_i=n+l_k}^n \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
& \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{l=1}^{(l_s + j_{sa}^{ik})} \sum_{j_{sa}^{ik}=l}^{l_{sa}-l+1} j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik} \\
& \sum_{n_i=n+l_k}^n \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
& \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -
\end{aligned}$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)} j_{sa}^{sa=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-l_{i_2})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-l_{k_2})}^{(\quad)}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!}$$

$$\frac{1}{(n-s)!}$$

$$\frac{(l_s + j_{sa}^{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}{(D - l_i)!}$$

$$\frac{(D - l_i)!}{(D + j_{sa} + l_s - n - l_i - j_{sa} - 1)! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l \neq l \wedge l \leq D - n + 1) \vee$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq l \wedge l \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D + s - n < l_i \leq D + l_{sa} + s - n - j_{sa}) \vee$$

$$(D \geq n < n \wedge l \neq l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^l\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$\sum_{k=0}^{(j_{sa}^{ik} - j_{sa})} \sum_{l_{ik}=l_{ik}+n-D}^{(j_{sa}^{ik} - j_{sa})} \sum_{j_{sa}=l_{sa}+n-D}^{(j_{sa}^{ik} - j_{sa})} l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1$$

$$\sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-k_2}$$

$$\frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

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$$\begin{aligned}
 & \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_{ik}+n-D)}^{l_{sa}-l+1} \sum_{j_{sa}=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}^{ik}}^{n_{ik}+j_{ik}-j_{sa}^{ik}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{sa} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(n_i + j_{sa} - n - 1)! \cdot (n - j_{sa}^{ik} - 1)!}{(n_i - j_{ik} - l_{k_1} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{ik} - l_{ik} - j_{sa}^{ik})!}{(j_{ik} + j_{sa} - j_{sa}^{ik} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - j_{sa}^{ik} - l_{sa})! \cdot (n + j_{sa} - j_{sa}^{ik} - s)!} \cdot \\
 & \sum_{k=l}^{( )} \sum_{(j_{ik}=j_{sa}^{ik}+j_{sa}^{ik}-j_{sa})}^{l_s+j_{sa}-l} \sum_{j_{sa}=l_i+n+j_{sa}-D-s} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}}^{( )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-l_{k_2})} \\
 & \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j_{sa}^{ik} - s - j_{sa}^{ik} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j_{sa}^{ik} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!} \cdot \\
 & \frac{1}{(n - s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
 \end{aligned}$$

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$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\left( (D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge \right.$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D + s - n < l_i \leq D + l_{sa} + s - n - j_{sa})$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$D - n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
 f_z S_{j_{ik} j^{sa}}^{DOST} &= \sum_{k=l}^{(l_{sa}+n+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{(j_{ik}=l_{ik}+n-D)}^{l_{sa}-l+1} \sum_{j^{sa}=l_{sa}+n-D} \\
 &\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
 &\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \\
 &\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \\
 &\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \\
 &\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \\
 &\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa} - 1)! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \\
 &\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 &\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})}^{l_{sa}-l+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \\
 &\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
 &\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \\
 &\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \\
 &\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \\
 &\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}
 \end{aligned}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)} j_{sa} = j_{sa} + j_{sa} - j_{sa}^{ik}$$

$$\sum_{n=n+k}^n \sum_{(n_{is} = n - k)}^{(n_{is} + 1)} j_{ik}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^{ik} - k_1}^{( )} \sum_{(n_{ik} = j_{sa} - k_2)}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa} - n_{sa} - j_{sa} - s - j_{sa} - 2 \cdot k_1 - 2 \cdot k_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - 2 \cdot j_{sa} - 2 \cdot k_1 - 2 \cdot k_2)!}$$

$$\frac{1}{(n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j_{sa} - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$(D \geq n < n \wedge l \neq l_i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa}^{ik} - n \leq l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1) \vee$$

$$(D < n < n \wedge l \neq l_i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1 \wedge$$

$$D + s - n < l_i \leq D + l_{sa} + s - n - j_{sa}) \vee$$

$$(D \geq n < n \wedge l \neq l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$\sum_{l=1}^{j_{sa}^{ik}} \sum_{j_{ik}=l}^{( )} \sum_{j_{sa}^{ik}=l}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{j_{sa}^{ik}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}^{( )}$$

$$\sum_{n_i=n+k}^n \sum_{n_{ik}=n+k_2-j_{ik}+1}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-k_2}$$

$$\frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \cdot$$



$$\sum_{k=l} \sum_{\binom{()}{j_{ik}=j_{sa}+j_{sa}^{lk}-j_{sa}}} \sum_{\binom{l_s+j_{sa}-l}{j_{sa}=l_i+n+j_{sa}-D-s}} \sum_{n_i=n+lk}^n \sum_{\binom{(n_i-j_s+1)}{n_{is}=n+lk+j_{sa}^{lk}-j_{sa}^{ik}-j_{sa}^{ik}}}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-lk_1} \sum_{\binom{()}{n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}^{ik}-lk_2}}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - s - j_{sa}^{ik} - 2 \cdot lk_1 - 2 \cdot lk_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot lk_1 - 2 \cdot lk_2)!} \cdot \frac{1}{(n-s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j_{sa} + l_i - n - l_i - j_{sa} - l_i)! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$D \geq n < n \wedge l = l \wedge l_{sa} = D + j_{sa} - n$$

$$j_{sa}^{lk} \leq j_{ik} \leq j_{sa} + j_{sa}^{lk} - j_{sa} - 1$$

$$j_{ik} + j_{sa} - j_{sa}^{lk} + 1 \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa}^{lk} + 1 \leq l_s \wedge l_{sa} - j_{sa}^{lk} - j_{sa} > l_{ik} \wedge$$

$$D > n < n \wedge l = l_s = 0 \wedge$$

$$j_{sa} \leq j_{sa} - 1 \wedge j_{sa}^{lk} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{lk} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, lk_1, \dots, lk_2, \dots, j_{sa}^i\} \wedge$$

$$s \leq s \wedge s \leq s + lk \wedge$$

$$lk_z: z = 2, \dots, k = lk_1 + lk_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \left( \sum_{k=l} \sum_{\binom{()}{j_{ik}=j_{sa}^{lk}}} \sum_{j_{sa}=j_{sa}} \right)$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - j_{sa} - s)!} + \\
 & \left( \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \right. \\
 & \left. \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \right. \\
 & \left. \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \right. \\
 & \left. \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \right. \\
 & \left. \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} - j_{sa})!} \cdot \right. \\
 & \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) - \\
 & \sum_{k=l}^{( )} \sum_{(j_{ik}=j_{sa}^{ik})}^{( )} \sum_{j^{sa}=j_{sa}}
 \end{aligned}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n_i-j_{ik}-l_{k_1}+1)}^{( )} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2}}$$

$$\frac{(2 \cdot n_i + j_{sa}^{ik} - n_{sa} - j_{ik} - j^{sa} - s - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2 + j_{sa}^s)!}{(2 \cdot n_i - n_{sa} - j^{sa} - n - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2 + j_{sa}^s)! \cdot (n - s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l = i l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge l_i \leq D + s - n \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_{z^s} S_{j_{sa}}^{ST} = \sum_{k=i}^n \sum_{l=i}^{\binom{()}{k}} \sum_{j_{sa}^s=j_{sa}}^{l_{sa}-i l+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - i l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=1}^{\infty} \sum_{i=1}^{\binom{D}{k}} \sum_{j^{sa}=j_{sa}}^{j_{ik}=j_{sa}^{ik}}$$

$$\sum_{n_i=n+k}^n \sum_{\binom{D}{k}} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}}$$

$$\frac{(2 \cdot n_i + j_{sa}^{ik} - n_{sa} - j_{ik} - j^{sa} - s - 2 \cdot k_1 - 2 \cdot k_2 + j_{sa}^{ik})!}{(2 \cdot n_i - n_{sa} - j^{sa} - n - 2 \cdot k_1 - 2 \cdot k_2 + j_{sa}^{ik})! \cdot (n - s)!}$$

$$\frac{(D - l_i)!}{(D + s - l_i)! \cdot (n - s)!}$$

$D \geq n < n \wedge l = i! \wedge l_s \leq D - n + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$

$D \geq n < n \wedge l = k > 0 \wedge$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{ik} \leq j_{sa}^i - 1 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 5 \wedge s = s + k \wedge$

$k_2: z \geq 2 \wedge k = k_1 \wedge k_2 \Rightarrow$

$$fz S_{j_{ik} j^{sa}}^{DOST} = \sum_{k=1}^{\infty} \sum_{i=1}^{\binom{D}{k}} \sum_{j^{sa}=j_{sa}}^{l_{sa}-i!+1}$$

$$\sum_{n_i=n+k}^n \sum_{\binom{D}{k}} \sum_{n_{sa}=n-j^{sa}+1}^{(n_i-j_{ik}-k_1+1) \cdot n_{ik}+j_{ik}-j^{sa}-k_2}$$

$$\frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - i l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!}$$

$$\sum_{k=i}^{( )} \sum_{l(j_{ik}=j_{sa}^{ik})} \sum_{j_{sa}=j_{sa}^{( )}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n_i-j_{ik}-l_{k_1}+1)}^{( )} \sum_{n_{sa}=n-l_{k_2}}^{( )}$$

$$\frac{(2 \cdot n_i + j_{sa}^{ik} - n_{sa} - j_{ik} - j_{sa} - s - 2 - 2 \cdot l_{k_2} + j_{sa}^{( )})!}{(2 \cdot n_i - n_{sa} - j_{sa} - n - 2 - 2 \cdot l_{k_2} + j_{sa}^{( )})! \cdot (n - s)!}$$

$$(D + j_{sa} - n - l_i)! \cdot (n - s)!$$

$$D \geq n < n \wedge l = i l \wedge l_s \leq D - n + 1$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n - j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D \geq n < n \wedge l = i l > 0 \wedge$$

$$j_{sa} \leq j_{sa}^{( )} - j_{sa}^{ik} = j_{sa}^{( )} - 1 \wedge j_{sa}^s < j_{sa}^{( )} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{( )}, \dots, j_{sa}^{( )}, \dots, l_{k_2}\}$$

$$s \geq 5, l_{k_2} = s + l_{k_1} \wedge$$

$$l_{k_2}: z = 2 \wedge l_{k_2} = l_{k_1} + 1 \Rightarrow$$

$$f_z S_{j_{ik} j_{sa}}^{DOST} = \sum_{k=i}^{( )} \sum_{l(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})}^{( )} \sum_{j_{sa}=j_{sa}^{( )}}^{l_{ik}+j_{sa}-i l-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-l_{k_2}}$$

$$\frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - i^l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i^l + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!}$$

$$\sum_{k=1}^n \sum_{(j_{ik}=j_{sa}^{ik})} j^{sa}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_i - j_{ik} - l_{sa} = 1)} \sum_{(n_{sa}=n_{ik}+j_{ik} - j^{sa} - l_{k_2})}$$

$$\frac{(2 \cdot n_i + j_{sa}^{ik} - n_{sa} - j_{ik} - j^{sa} - s - 2 \cdot l_{k_1} - 2 \cdot l_{k_2} + j_{sa}^s)!}{(2 \cdot n_i - n_{sa} - j_{ik} - n - 2 \cdot l_{k_1} - 2 \cdot l_{k_2} + j_{sa}^s)! \cdot (n - s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l = i^l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa} \leq j^{sa} \leq j_{ik} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \cdot (n_{sa} + j_{sa}^{ik}) = l_{ik} \wedge$$

$$D \geq n < n \wedge l = l_k > 1 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^i, \dots, j_{sa}^{ik}, l_{k_2}, j_{sa}^i, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + l_k \wedge$$

$$l_{k_2}: z = 2 \wedge l_k = l_{k_1} + l_{k_2} \Rightarrow$$

$$f_Z S_{j_{ik} j_{sa}}^{DOST} = \sum_{k=i^l} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{(l_{sa}+j_{sa}^{ik}-i^l-j_{sa}+1)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{\substack{(n_i-j_{ik}-\mathbb{k}_1+1) \\ (n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}} \sum_{\substack{n_{sa}=n-j^{sa}+1 \\ (n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - j_{ik} - l + j_{sa})!}{(l_{ik} - j_{ik} - l + j_{sa} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(j_{sa} - l - s)!}{(D + s - n - 1)! \cdot (n - s)!} \cdot \sum_{k=i}^{\binom{D}{l}} \sum_{j_{ik}=j_{sa}^{ik}} \sum_{j^{sa}=j_{sa}} \sum_{n_i=n+\mathbb{k}}^n \sum_{\substack{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1) \\ (n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}} \frac{(2 \cdot n_i + j_{ik} - n_{sa} - j_{ik} - j^{sa} - s - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2 + j_{sa}^s)!}{(2 \cdot n_i - n_{sa} - j^{sa} - n - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2 + j_{sa}^s)! \cdot (n - s)!} \cdot \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n \wedge n \wedge l = i \wedge l \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + j_{sa} > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D - n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_z S_{j_{ik}, j^{sa}}^{DOST} = \sum_{k=i}^l \sum_{(j_{ik}=j_{sa}^{ik})}^{(l_{ik}-i+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - 1)!}$$

$$\frac{(n_{sa} - n_{sa} - 1)!}{(n_{sa} - n_{sa} - 1)! \cdot (n_{sa} - j^{sa})!}$$

$$\frac{(l_{ik} - 1 - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - j_{sa} - l_{sa} - s)!}{(D + i - n - l_{sa})! \cdot (n - s)!}$$

$$\sum_{k=i}^l \sum_{(j_{ik}=j_{sa}^{ik})}^{(\quad)} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\quad)} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(2 \cdot n_i + j_{sa}^{ik} - n_{sa} - j_{ik} - j^{sa} - s - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2 + j_{sa}^s)!}{(2 \cdot n_i - n_{sa} - j^{sa} - n - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2 + j_{sa}^s)! \cdot (n - s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$D \geq n < n \wedge l = i \wedge l_s \leq D - n + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$

$l_{ik} \leq D + j_{sa}^{ik} - n \wedge l_i \leq D + s - n \wedge$



$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=i}^l \sum_{(j_{ik}=j_{sa}^{ik})}^{(l_{sa}+j_{sa}^{ik}-i-l-j_{sa}+1)} \sum_{(j_{sa}^s=j_{sa}^{ik}-1)}^{(j_{sa}^s=j_{sa}^{ik}-1)} \sum_{(j_{sa}^s=j_{sa}^{ik}-1)}^{(j_{sa}^s=j_{sa}^{ik}-1)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_i-j_{ik}+1)}^{(n_i-j_{ik}-1)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik})}^{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik})} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik})}^{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik})}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1)!}{(j_{ik} - j_{sa}^{ik})! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{sa} - n_{sa} - 1)!}{(n_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa}^{ik})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa}^{ik})!}$$

$$\frac{(l_{ik} - i - l - j_{sa}^{ik})!}{(n_{ik} - j_{ik} - i - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!}$$

$$\sum_{k=i}^l \sum_{(j_{ik}=j_{sa}^{ik})}^{( )} \sum_{j_{sa}^s=j_{sa}^{ik}}^{( )}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{( )} \sum_{n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}}^{( )}$$

$$\frac{(2 \cdot n_i + j_{sa}^{ik} - n_{sa} - j_{ik} - j_{sa}^{ik} - s - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2 + j_{sa}^s)!}{(2 \cdot n_i - n_{sa} - j_{sa}^{ik} - n - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2 + j_{sa}^s)! \cdot (n - s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$\left( (D \geq n < n \wedge l = {}_i l \wedge l_s \leq D - n + 1 \wedge \right.$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l = {}_i l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$l_{sa} \leq D + j_{sa} - n \wedge l_i \leq D + s - n) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\}$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=i}^{l} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j_{sa}=j_{sa}}^{(l_{ik}-i^{l+1}) l_{sa}-i^{l+1}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!}$$

$$\frac{(l_{ik} - i^l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i^l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=i}^{\binom{()}{l}} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j_{sa}=j_{sa}^{ik}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n_i-j_{ik}-l_{k_1}+1)}^{\binom{()}{n_{ik}}} \sum_{n_{sa}=n-j_{sa}-l_{k_2}}^{\binom{()}{n_{sa}}}$$

$$\frac{(2 \cdot n_i + j_{sa}^{ik} - n_{sa} - j_{ik} - j_{sa} - s - 2 \cdot l_{k_1} - 2 \cdot l_{k_2} + j_{sa})!}{(2 \cdot n_i - n_{sa} - j_{sa} - n - 2 \cdot l_{k_1} - 2 \cdot l_{k_2} + j_{sa})! \cdot (n - s)!} \cdot \frac{(D + s - n - l_i)!}{(n - s)!}$$

$$D \geq n < n \wedge l = i \wedge l_{sa} \leq D + j_{sa} \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j_{sa} \leq j_{ik} + j_{sa} - s$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge l = i > 0 \wedge$$

$$j_{sa} \leq j_{sa} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, \dots, j_{sa}, \dots, l_{k_2}\}$$

$$s \geq 5 \wedge s = s + l_{k_1} \wedge$$

$$l_{k_2}: z = 2 \wedge l_{k_2} = l_{k_1} + 1 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \left( \sum_{k=i}^{\binom{()}{l}} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})}^{\binom{()}{n_{ik}}} \sum_{j_{sa}=j_{sa}^{ik}}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-l_{k_2}} \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \right)$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_{ik} - i^l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i^l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - 1)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!} \cdot$$

$$\left( \sum_{k=i^l}^{(j^{sa} + j_{sa}^{ik} - j_{sa} - 1) \cdot l_{sa} - i^l - j_{sa}^{ik} + 1} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{sa}+1}^{n_{ik} - j_{ik} - j^{sa} - l_{k_2} + 1} \right)$$

$$\sum_{n_i=n+l_{k_1}}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_{ik}-j_{ik}-j^{sa}-l_{k_2})} \sum_{n_{sa}=n-j^{sa}+1}^{(n_{sa}-j_{sa}+1)}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j_{ik} - 2)! \cdot (n_{ik} - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_{ik} - i^l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i^l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=i^l}^{(l_{ik} - i^{l+1})} \sum_{(j_{ik}=j_{sa}^{ik})}^{l_{sa} - i^{l+1}} \sum_{j^{sa}=l_{ik}+j_{sa}-i^l-j_{sa}^{ik}+2}^{l_{sa} - i^{l+1}}$$

$$\sum_{n_i=n+l_{k_1}}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})}$$

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$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - i^l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i^l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa}^{ik})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - l_{sa})!} \cdot \frac{\binom{D + j^{sa} - l_{sa} - j_{sa}^{ik}}{(D + j^{sa} - n - j_{sa}^{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - l_{sa} - s)!}}{\sum_{k=1}^n \sum_{j_{ik}=j_{sa}^{ik}} \sum_{j^{sa}=j_{sa}} \binom{(\cdot)}{n_i = n_{ik} + \mathbb{k}_1} \binom{(\cdot)}{n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \frac{(2 \cdot n_i - n_{sa} - j_{sa}^{ik} - j_{sa} - j^{sa} - s - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2 + j_{sa}^s)!}{(2 \cdot n_i - n_{sa} - j_{sa}^{ik} - j_{sa} - j^{sa} - s - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2 + j_{sa}^s)! \cdot (n - s)!} \cdot \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq i^l \leq n \wedge l = i^l \wedge l_{sa} \leq D - j_{sa} - n \wedge$$

$$j_{sa}^{ik} \leq j_{ik} - j_{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa} + j_{sa}^{ik} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + j_{sa}^{ik} > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$j_{sa}^{ik} \geq n - j_{sa} \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z \mathcal{S}_{j_{ik}, j^{sa}}^{DOST} = \left( \sum_{k=i}^l \sum_{(j_{ik}=j_{sa}^{ik})}^{(l_{ik}-i^{l+1})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{(l_{sa}-i^{l+1})} \right. \\ \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{(n_{ik}+j_{ik}-j^{sa})} \\ \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\ \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\ \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\ \frac{(l_{ik} - i^{l+1} - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i^{l+1} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \\ \left. \frac{(D - j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!} \right) + \\ \left( \sum_{k=i}^l \sum_{(j_{ik}=j_{sa}^{ik})}^{(l_{ik}-i^{l+1})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{(l_{sa}-i^{l+1})} \right. \\ \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \\ \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\ \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\ \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\ \frac{(l_{ik} - i^{l+1} - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i^{l+1} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \left. \right)$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=i}^l \sum_{\binom{()}{j_{ik}=j_{sa}^{ik}}} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=n+l_k}^n \sum_{\binom{()}{n_{ik}=n_i-j_{ik}-k_1+1}} \sum_{n_{sa}=n-l_{sa}-j_{sa}^{ik}-k_2}$$

$$\frac{(2 \cdot n_i + j_{sa}^{ik} - n_{sa} - j_{ik} - j^{sa} - s - 2 \cdot k_1 - 2 \cdot k_2 + j_{sa})!}{(2 \cdot n_i - n_{sa} - j^{sa} - n - 2 \cdot k_1 - 2 \cdot k_2 + j_{sa})! \cdot (n - s)!} \cdot \frac{1}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l = i \wedge l_s \leq D - n + 1$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n - l_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_{sa} + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n \wedge$$

$$D \geq n < n \wedge l = k > i \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{ik} \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^i, j_{sa}^{k_1}, j_{sa}^{ik}, j_{sa}^{k_2}, j_{sa}^{i_1}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = i + k \wedge$$

$$k = i + k_1 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z^{S_{j_{ik}, j_{sa}^{ik}}}^{DOST} = \sum_{k=i}^l \sum_{\binom{()}{j_{ik}=j_{sa}^{ik}}} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=n+l_k}^n \sum_{\binom{()}{n_{ik}=n+l_{k_2}-j_{ik}+1}} \sum_{n_{sa}=n-j_{sa}^{ik}+1}^{(n_i-j_{ik}-k_1+1) \cdot n_{ik}+j_{ik}-j_{sa}^{ik}-k_2}$$





$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n)) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1}^{(n_i-j_{ik}-\mathbb{k}_1-1)} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \frac{(n_{sa}-i^{l+})!}{(j_{ik}^{s} - j_{ik} - 1)! \cdot (n_{ik} - n_{sa} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa}^s - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=i}^{( )} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1}^{( )} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(2 \cdot n_i + j_{sa}^{ik} - n_{sa} - j_{ik} - j^{sa} - s - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2 + j_{sa}^s)!}{(2 \cdot n_i - n_{sa} - j^{sa} - n - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2 + j_{sa}^s)! \cdot (n - s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik})) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^i = j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^{s-1}, j_{sa}^{ik}, \dots, \mathbb{k}_2, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s_{i-1} + 1 \wedge$$

$$\mathbb{k}_z: \mathbb{k}_z = 2 \wedge \mathbb{k} = \mathbb{k}_1 \vee \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \left( \sum_{k=l} \sum_{\binom{()}{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}} \sum_{j^{sa}=l_{sa}+n-D}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \right. \\ \left. \sum_{n_i=n+\mathbb{k}}^n \sum_{\binom{(n_i-j_{ik}-\mathbb{k}_1+1)}{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \right. \\ \left. \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \right)$$

$$\begin{aligned}
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \left( \sum_{k=l}^{j^{sa} + j_{sa}^{ik} - j_{sa} - 1} \sum_{j_{ik} = l_{ik} + n - j^{sa} - l - j_{sa}^{ik} + 1} \sum_{j_{sa} = l_{sa} - n - D}^{l - j_{sa}^{ik} + 1} \right) \cdot \\
 & \sum_{n_i = n + k}^n \sum_{n_{ik} = n + k_2 - j_{ik} + 1}^{(n_i - j_{ik} - 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - k_2} \frac{(n_i - n_{ik})!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{k=l}^{(l_{ik} - l + 1)} \sum_{j_{ik} = l_{ik} + n - D}^{l_{sa} - l + 1} \sum_{j_{sa} = l_{sa} - n - D}^{l_{sa} - l + 1} \cdot \\
 & \sum_{n_i = n + k}^n \sum_{n_{ik} = n + k_2 - j_{ik} + 1}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - k_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
 \end{aligned}$$

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$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - 1)!}$$

$$\sum_{k=0}^{j_{sa} - l - j_{sa}^{ik} + 1} \binom{j_{sa} - l - j_{sa}^{ik} + 1}{k} (j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}) j^{sa} - D - s$$

$$\sum_{i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{i=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1}^{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^{ik} - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^{ik} - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}$$

$$\frac{1}{(n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$(D > n) \wedge n \wedge l_s > D - n + 1 \wedge$$

$$D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 2 \leq l \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 2 \leq l \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik})) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_{z=1, \dots, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{ik}-l+1)} \sum_{l_{ik}+n-D}^{l_{sa}-l+1} \sum_{j_{sa}=l_{sa}+n-D}^{l_{sa}-l+1} \sum_{i=n+\mathbb{k}}^n \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{j_{ik}-\mathbb{k}_1+1} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l} \sum_{\binom{()}{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}} \sum_{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} j^{sa} = l_i + n + j_{sa} - D - s$$

$$\sum_{n_i=n+l_k}^n \sum_{\binom{()}{n_{is}=n+l_k+j_{sa}^{ik}-j_{sa}^{ik}+1}} (n_i - j_s + 1)$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}} \sum_{\binom{()}{n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}^{ik}+1}} (n_{sa} - l_{k_2})$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!} \cdot \frac{1}{(n-s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa} - j_{ik} - 1) \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(n + j_{sa} + j_{sa}^{ik} - n - l_i - j_{sa}^{ik} - 1)! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\begin{aligned} & ((D \geq n < n \wedge l_s > D - l_i + 1 \wedge \\ & 2 \leq l \leq D + l_{ik} + j_{sa} - n - l_s - j_{sa}^{ik} + 1 \wedge \\ & j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 = l_s \vee (l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik}) \vee \\ & (D \geq n < n \wedge l_s > D - l_i + 1 \wedge \\ & 2 \leq l \leq D + l_{ik} + j_{sa} - n - l_s - j_{sa}^{ik} + 1 \wedge \\ & j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik})) \wedge \\ & D \geq n < n \wedge l = l_k > 0 \wedge \\ & j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge \end{aligned}$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z^{SDOST} = \left( \sum_{k=l} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})}^{(l_{ik}-l+1)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}} \right. \\ \sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-k_2} \\ \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - k_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \\ \left. \frac{(n - l - j_{sa}^{ik})!}{(n - j_{sa}^{ik} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \right) + \\ \left( \sum_{k=l} \sum_{(j_{ik}=l_{ik}+n-D)}^{(l_{sa}+n+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{j_{sa}=l_{sa}+n-D}^{l_{sa}-l+1} \right. \\ \sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-k_2} \\ \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!} \\ \left. \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \right)$$

$$\begin{aligned}
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})}^{l_{sa}+l+1} \sum_{(j_{sa}=j_{ik}+j_{sa}^{ik}-j_{sa}^{ik}+1)}^{\Delta} \\
 & \sum_{n_i=n+l_{sa}+k}^n \sum_{(n_i-j_{ik}+1)}^{(n_i-j_{ik}+1)} \sum_{(n_{ik}=j_{ik}-l_{sa}-k_2)}^{n_{ik}+j_{ik}-k_2} \\
 & \frac{(n_i - n_{ik} - j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}{(n_{ik} - j_{sa} - k_2 - 1)!} \cdot \\
 & \frac{(n_{ik} - j_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) - \\
 & \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{l_{sa}+l+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{\Delta} \\
 & \sum_{n_i=n+l_{sa}+k}^n \sum_{(n_{is}=n+l_{sa}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-k_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{(\quad)}
 \end{aligned}$$

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$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!} \cdot \frac{1}{(n-s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - l)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z \geq 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z^{S_{j_{ik}, j_{sa}}^{DOST}} = \left( \sum_{k=l} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{j^{sa}=l_{sa}+n-D}^{l_s+j_{sa}-l} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \right)$$

$$\begin{aligned}
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \\
& \left( \sum_{k=l}^{(j^{sa} + j_{sa}^{ik} - j_{sa} - 1)} \sum_{(j_{ik} = l_s + n + j_{sa}^{ik} - D - 1)}^{l_s + j_{sa} - l} \sum_{j^{sa} = l_s + n - D}^{l_s + j_{sa} - l} \right. \\
& \sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - k_2} \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \\
& \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_s + n + j_{sa}^{ik} - D - 1)}^{l_s - l + 1} \sum_{j^{sa} = l_s + j_{sa} - l + 1}^{l_s - l + 1} \\
& \sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - k_2} \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot
\end{aligned}$$

$$\begin{aligned}
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \binom{l_s + j_{sa}^{ik} - l}{j_{ik} = l_s + n + j_{sa}^{ik} - j_{sa} - 1} j^{sa} = l_s + n - j_{sa} - 1 \\
 & \sum_{n_i = n - j_{ik} - n_{ik} - j_{sa} - l_{k_2}}^n \binom{n - j_{ik} - n_{ik} - j_{sa} - l_{k_2}}{n_{ik} = n + l_{k_2} - j_{ik} - 1} \binom{n_i - j_{ik} - n_{ik} - j_{sa} - l_{k_2}}{n_{sa} = n - j^{sa} + 1} \\
 & \frac{(n_i - j_{ik} - n_{ik} - j_{sa} - l_{k_2} - 1)!}{(j_{ik} - j_{sa} - l_{k_2} - 1)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(j_{sa} - j_{ik} - n_{ik} - l_{k_2} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (j_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) - \\
 & \sum_{k=l} \binom{()}{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}} \sum_{l_s + j_{sa} - l}^{l_s + j_{sa} - l} \\
 & \sum_{n_i = n + l_{k_2}}^n \binom{(n_i - j_s + 1)}{n_{is} = n + l_{k_2} + j_{sa}^{ik} - j_{ik}}
 \end{aligned}$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{\binom{()}{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}$$

$$\frac{\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - \mathbb{k}_1 - 1)!}}{(D - l)!} \cdot \frac{(n - l)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n_{sa} + j_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 2 \leq l \leq D - n + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} = l_{sa} \wedge$

$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{ik} < j_{sa} - 1 \wedge j_{sa}^{ik} = j_{sa}^{ik} - 1$

$s: \{j_{sa}^{s-\mathbb{k}_1}, j_{sa}^{s-\mathbb{k}_2}, \dots, \mathbb{k}_2, \dots, j_{sa}^s\} \wedge$

$s \geq 5 \wedge s = s + \mathbb{k}_1 \wedge$

$\mathbb{k}_2: 2 \leq \mathbb{k}_2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_z S_{j_{ik} j_{sa}}^{DOST} = \sum_{k=l} \sum_{\binom{(l_s+j_{sa}^{ik}-l)}{(j_{ik}=l_s+n+j_{sa}^{ik}-D-1)}} \sum_{\binom{l_{sa}-l+1}{j^{sa}=l_{sa}+n-D}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{\binom{(n_i-j_{ik}-\mathbb{k}_1+1)}{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}} \sum_{\binom{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}{n_{sa}=n-j^{sa}+1}}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$



$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \left( \sum_{k=l} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})} \sum_{(l_s+j_{sa}^{ik}-l)} j^{sa=j_{sa}-j_{sa}^{ik}} \right. \\ \left. \sum_{n_i=n+\mathbb{k}} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)} \sum_{(n_i-j_{ik}-\mathbb{k}_1)} \sum_{(n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)} \right. \\ \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_i - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \Big) + \\ \left( \sum_{k=l} \sum_{(j_{ik}=l_s+n+j_{sa}^{ik}-D-1)} \sum_{(l_{sa}-l+1)} \sum_{(j^{sa}=l_{sa}+n-D)} \right. \\ \left. \sum_{n_i=n+\mathbb{k}} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)} \sum_{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \right. \\ \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \Big)$$

$$\begin{aligned}
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_s + n + j_{sa}^{ik} - D - j_{sa})}^{l_{sa} + 1} \sum_{(j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik} + 1)} \\
 & \sum_{n_i = n + k}^n \sum_{(n_i - j_{ik} = \dots)}^{(n_i - j_{ik} - 1)} \sum_{(n_{ik} + j_{ik} = \dots)}^{n_{ik} + j_{ik} - j_{sa}^{ik} - k_2} \\
 & \frac{(n_i - n_{ik})!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - \dots - k_2 - 1)!}{(j^{sa} - \dots - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) - \\
 & \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)}^{(l_s + j_{sa}^{ik} - l)} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}} \\
 & \sum_{n_i = n + k}^n \sum_{(n_{is} = n + k + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)} \\
 & \sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - k_1} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - k_2)}^{(\dots)}
 \end{aligned}$$

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$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!} \cdot \frac{1}{(n-s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 \geq l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$

$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\}$

$s \geq 5 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_z^{S_{j_{ik}, j_{sa}^{ik}}} = \sum_{k=l}^{\binom{()}{}} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{j^{sa}=l_{sa}+n-D}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$



$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{(\quad)} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{l_s+j_{sa}-l} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_s+j_{sa}-l} \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{sa}^{ik}}^{(\quad)} \sum_{(n_{sa}=n_{ik}+j_{ik}-l_{k_2})}^{(\quad)} \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - j_{sa}^{ik} - 2 \cdot l_{k_2})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - j_{sa}^{ik} - 2 \cdot l_{k_2})!} \cdot \frac{1}{(n-s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{sa}^{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot l_i!}{(D + j^{sa} + \dots - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{sa} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq n_{sa} \leq n_{sa} - j_{sa}^{ik} + j_{sa} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 \geq l_s \wedge l_s + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} < j_{sa} - 1 \wedge j_{sa} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, l_{k_1}, j_{sa}^{ik}, \dots, l_{k_2}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$l_{k_2} = s + l_{k_1} \wedge$$

$$l_{k_2}: z = 2 \wedge k = l_{k_1} + l_{k_2} \Rightarrow$$

$$fz S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(\quad)} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{l_{sa}-l+1} \sum_{j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}^{l_{sa}-l+1}$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_{ik}-l_{k_1}+1) \\ (n_{ik}=n+l_{k_2}-j_{ik}+1)}} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - j_{sa})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_s - l - j_{sa} - s)!}{(l_s - j^{sa} - n - 1)! \cdot (n - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{\binom{()}{l_s+j_{sa}-l}} \sum_{\substack{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}) \\ j^{sa}=l_i+n+j_{sa}-D-s}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{\binom{()}{l_s+j_{sa}-l}} \\
 & \frac{(2 \cdot n_{is} + j_{ik} - n_{sa} - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!} \cdot \\
 & \frac{1}{(n - s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$$l_{ik} - j_{sa}^{ik} + 1 \geq l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-j_{sa})}^{(l_{ik}-l+1)} j_{sa}^{sa=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n=n+l}^n \sum_{(n_{ik}=n+l+k_2-j_{ik}+j_{sa}^{ik})}^{(n_{ik}-j_{ik}-k_1+1)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-k_2)}^{(n_{sa}+1)} \frac{(n_{ik}-n_{ik}-1)!}{(j_{ik}-2)! \cdot (n_{ik}-j_{ik}+1)!} \cdot \frac{(n_{ik}-n_{sa}-k_2-1)!}{(n_{ik}-j_{ik}-1)! \cdot (n_{ik}-j_{ik}-n_{sa}-j_{sa}-k_2)!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j_{sa}-n-1)! \cdot (n-j_{sa})!} \cdot \frac{(l_{ik}-l-j_{sa}^{ik})!}{(l_{ik}-j_{ik}-l+1)! \cdot (j_{ik}-j_{sa}^{ik}-1)!} \cdot \frac{(D+j_{sa}-l_{sa}-s)!}{(D+j_{sa}-n-l_{sa})! \cdot (n+j_{sa}-j_{sa}-s)!}$$

$$\sum_{k=l}^{(l_s+j_{sa}^{ik}-l)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(l_s+j_{sa}^{ik}-l)} \sum_{(j_{sa}^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(n_{i-s}+1)}$$

$$\sum_{n_i=n+l}^n \sum_{(n_{is}=n+l+k+j_{sa}^{ik}-j_{ik})}^{(n_{i-s}+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-k_1}^{( )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-k_2)}^{( )}$$

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$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!} \cdot \frac{1}{(n-s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 \geq l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\}$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned} f_{j_{ik}, j_{sa}}^{S, ST} &= \sum_{k=l}^{(l_{sa} + j_{sa}^{ik} - l - j_{sa} + 1)} \sum_{(j_{ik} = l_{ik} + n - D)} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}} \\ &\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \\ &\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \end{aligned}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)} j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n_{is} + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - k_2} \sum_{(n_{is} = n_{is} + j_{ik} - j_{sa}^{ik} - k_2)}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - j_{sa}^{ik} - 2 \cdot k_2 - 2 \cdot k_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - j_{sa}^{ik} - 2 \cdot k_2 - 2 \cdot k_2)!} \cdot \frac{1}{(n - s)!}$$

$$\frac{(j_{sa} - l - 1)!}{(j_{sa} + j_{sa}^{ik} - j_{sa}^{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_i - l)!}{(D + j^{sa} + \dots - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s = D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{sa} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + \dots -$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_s + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge l = k > \dots \wedge$$

$$j_{sa} - j_{sa} - 1 \wedge j_{sa} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{i_1}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$j_{sa} = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z S_{j_{ik} j_{sa}}^{DOST} = \sum_{k=l}^{(j_{sa} + j_{sa}^{ik} - j_{sa})} \sum_{(j_{ik} = l_s + n + j_{sa}^{ik} - D - 1)} j^{sa} = l_i + n + j_{sa} - D - s$$

$$\begin{aligned}
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{k=l}^{(l_s+l)-l} \sum_{(j_{ik}-s+n+j_{sa}^{ik}-D-1)}^{l_i+j_{sa}-l-s+1} \sum_{j^{sa}=l_s+j_{sa}-l+1} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -
 \end{aligned}$$

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$$\sum_{k=l} \sum_{\binom{()}{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}} \sum_{j_{sa}=l_{sa}+n-D}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{\binom{()}{n_{is}=n+\mathbb{k}+j_{sa}^{ik}}} \sum_{n_{sa}=n_{ik}+j_{sa}^{ik}-\mathbb{k}_2}^{\binom{()}{n_{sa}=n_{ik}+j_{sa}^{ik}-\mathbb{k}_2}} \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!} \cdot \frac{1}{(n-s)!} \cdot \frac{(l-s-l-1)!}{(l_s + j_{sa}^s - j_{ik} - 1) \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D-l_i)!}{(n+j_{sa}-j^{sa}-s)!}$$

$$D \geq n < n \wedge l_s > D - n - 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa}$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - s$$

$$l_i - j_{sa}^{ik} + 1 \leq l_s \wedge l_{sa} - j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D > n < n \wedge l = l_s = 0 \wedge$$

$$j_{sa} \leq j_{sa}^s - 1 \wedge j_{sa}^{ik} < j_{sa}^s - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{l_1}, \mathbb{k}_2, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s \leq s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2, \dots, \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l} \sum_{\binom{()}{j_{ik}=l_s+n+j_{sa}^{ik}-D-1}} \sum_{j_{sa}=l_i+n+j_{sa}-D-s}^{l_i+j_{sa}-l-s+1}$$

$$\begin{aligned}
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{k=l}^{(l_s+j_{sa}-l)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{l_i+j_{sa}-l-s+1} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -
 \end{aligned}$$

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$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k+j_{sa}^{ik}-j_{sa}^{ik})} \sum_{(n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-k_1)} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-k_2)} \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - s - j_{sa}^{ik} - 2 \cdot k_1 - 2 \cdot k_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot k_1 - 2 \cdot k_2)!} \cdot \frac{1}{(n-s)!} \cdot \frac{(n-l-1)!}{(l_s + j_{sa}^{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D-l_i)!}{(D+j_{sa}^s + n - l_i - j_{sa}^{ik})! \cdot (n + j_{sa} - j_{sa}^s - s)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(\quad)} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})}^{(\quad)} \sum_{j_{sa}^{sa}+n-D}^{l_{sa}-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+\mathbb{k}_2}^{(n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{sa} - 1)!}{(j_{ik} - \mathbb{k}_2)! \cdot (n_{sa} - j_{ik} + 1)!}$$

$$\frac{(n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{(\quad)} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})}^{(\quad)} \sum_{j_{sa}^{sa}=l_i+n+j_{sa}-D-s}^{l_s+j_{sa}-l}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1}^{(\quad)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}$$

$$\frac{1}{(n-s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} - 1 \wedge$$

$$j_{sa}^i \leq j_{sa}^i - 1 \wedge j_{ik} < j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^i, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^s, \dots, j_{sa}^i\}$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$$fz_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{sa} + j_{sa}^{ik} - l - j_{sa} + 1)} \sum_{(j_{ik} = l_{sa} + n + j_{sa}^{ik} - D - j_{sa})} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}} \\ \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa} - 1)!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa})!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{j_{ik}=l_i+1}^{(l_s+j_{sa}^{ik}-l)} \sum_{j_{sa}^{ik}=j_{sa}^{ik}-D-s}^{(j_{sa}^{ik}-l_{sa}-j_{ik})} \sum_{n_{is}=n+\mathbb{k}}^{(n_i-j_s+1)} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}^{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})} \frac{(2 \cdot n_{is} + j_{ik} - j_{sa}^{ik} - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^{ik} - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!} \cdot \frac{1}{(n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$



$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - \mathbb{k}_1 - 1)!} \cdot \frac{(D - l)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (j_{sa}^s - j_{sa}^{ik} - \mathbb{k}_1)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \vee (l_{ik} + j_{sa} - s > l_s) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \vee (l_{ik} + j_{sa} - s = l_{sa}) \wedge$$

$$D \geq n < n \wedge l_s > 0 \wedge$$

$$j_{sa} \leq j_{sa} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i, \dots, j_{sa}^i\} \wedge$$

$$s > n \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_{ik}+n-D)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa} - 1)!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa})!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{j_{ik}=l_i+1}^{(l_s+j_{sa}^{ik}-l)} \sum_{j_{sa}^{ik}=j_{ik}-D-s}^{(j_{sa}^{ik}-j_{ik})} \sum_{j_{sa}^{ik}=n+lk}^{(n_i-j_s+1)} \sum_{(n_{is}=n+lk+j_{sa}^{ik}-j_{ik})} \sum_{(k=n_{is}+j_{sa}^s-j_{sa}^{ik}-lk_1)}^{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-lk_2)} \frac{(2 \cdot n_{is} + j_{ik} - j_{sa}^s - n_s - j^{sa} - s - j_{sa}^{ik} - 2 \cdot lk_1 - 2 \cdot lk_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_s - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot lk_1 - 2 \cdot lk_2)!} \cdot \frac{1}{(n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{sa}}^{DOST} = \sum_{k=l}^{(j_{sa} + j_{sa}^{ik} - j_{sa})} \sum_{(j_{ik} = l_{ik} + n - D) j_{sa}^{ik} - D - s} \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n_{sa} - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_2 - 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2} \frac{(n_i - n_{ik} - 1)!}{(j_{sa} - j_{sa}^{ik} - 1)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{sa}^{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} + \sum_{k=l}^{(l_{ik} - l + 1)} \sum_{(j_{ik} = l_{ik} + n - D)}^{l_i + j_{sa} - l - s + 1} \sum_{j_{sa} = l_{ik} + j_{sa} - l - j_{sa}^{ik} + 2}^{j_{sa}^{ik} + 2}$$

GÜLDÜNKYA



$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - j_{sa})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} - l_{sa} - j_{sa})!}{(j_{ik} + j_{sa} - j_{sa} - l_{ik})! \cdot (j^{sa} + j_{ik} - j_{sa})!} \cdot \\
 & \frac{(n + j_{sa} - l - s)!}{(n + j_{sa} - n - 1)! \cdot (n - j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{j_{sa}^{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(n)} \sum_{j^{sa}=l_{sa}+n-D}^{l_s+j_{sa}-l} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}}^{(n)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{(n)} \\
 & \frac{(2 \cdot j_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!}{(2 \cdot j_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!} \cdot \\
 & \frac{1}{(n - s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa})$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$fz S_{j_{ik}}^p = \sum_{k=l}^{(l_i+n+j_{sa}^{ik}-s-1)} \sum_{(j_{ik}=l_{ik}+n-D)}^{l_i+j_{sa}-l-s+1} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{n_{ik}+j_{ik}-j^{sa}-k_2} \sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-k_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\begin{aligned}
 & \sum_{k=l} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(l_{ik}-l+1)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{l_i+j_{sa}-l-s+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{(n_{sa}=n-j_{sa}^{ik})}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} + j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_i + j^{sa} - n - 1)! \cdot (n - j^{sa} - 1)!}{(n_i - j_{ik} - l_{k_1} + 1)! \cdot (j_{ik} - j_{sa} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{ik} - l_{ik} - j_{sa})!}{(j_{ik} + j_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - l_{sa} - s)! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})}^{(l_s+j_{sa}^{ik}-l)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{()} \\
 & \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!} \cdot \\
 & \frac{1}{(n - s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
 \end{aligned}$$

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$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 1 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^i, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = \mathbb{k} + \mathbb{k} \wedge$$

$$s = \mathbb{k} \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(j^{sa} + j_{sa}^{ik} - j_{sa})} \sum_{(j_{ik} = l_{ik} + n - D)} \sum_{j^{sa} = l_{sa} + n - D}^{l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1}$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{k=l}^{(l_{ik}-l)} \sum_{j^{sa}=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2}^{l_{sa}-l+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -
 \end{aligned}$$

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$$\sum_{k=l} \sum_{\binom{()}{j_{ik}=j^{sa}+j_{sa}^{lk}-j_{sa}}} \sum_{l_s+j_{sa}-l}^{j^{sa}=l_i+n+j_{sa}-D-s}$$

$$\sum_{n_i=n+l_k}^n \sum_{\binom{(n_i-j_s+1)}{n_{is}=n+l_k+j_{sa}^{lk}-j_{sa}}}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{lk}-l_{k_1}} \sum_{\binom{()}{n_{sa}=n_{ik}+j_{sa}^{lk}-l_{k_2}}}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{lk} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!}$$

$$\frac{1}{(n-s)!}$$

$$\frac{(l_s + j_{sa}^{lk} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{lk} - 1)!}{(D - l_i)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + l_i - n - l_i - j_{sa}^{lk})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{lk} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{lk} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{lk} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{lk} + 1 = l_s \wedge l_{sa} + j_{sa}^{lk} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{lk} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{lk} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{lk} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{lk} + 1 = l_s \wedge l_{sa} + j_{sa}^{lk} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{lk} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{lk} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{lk} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{lk} + 1 > l_s \wedge l_{sa} + j_{sa}^{lk} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_{zj_{sa}^{ik}}^{SDOST} = \sum_{l=1}^{(l_{sa} + j_{sa}^{ik} - D - j_{sa})} \sum_{j_{ik}=l_{sa}+n-D}^{l_{sa}-l+1} \sum_{n=D}^{n-D} \sum_{n_i=n+k}^n \sum_{n_{ik}=n_{sa}-j_{ik}+1}^{(n_i-j_{ik}-1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-k_2} \frac{(n_i - n_{ik} - 1)!}{(n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} + \sum_{k=l}^{(l_{ik}-l+1)} \sum_{j_{sa}^{ik}=j_{sa}+n}^{l_{sa}-l+1} \sum_{j_{sa}^{ik}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - j_{sa})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} - l_{sa} - j_{sa})!}{(j_{ik} + j_{sa} - j_{sa} - l_{ik})! \cdot (j^{sa} - j_{sa} - j_{sa})!} \cdot \\
 & \frac{(n + j_{sa} - n - s)!}{(n + j_{sa} - n - s)! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{(l_s+j_{sa}-l)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{(n+l+j_{sa}^{ik}-D-s)} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}}^{(n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1})} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \\
 & \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!} \cdot \\
 & \frac{1}{(n - s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$



$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$fz^{S_{j_{ik}, j_{sa}^{ik}}} = \sum_{k=l}^{\binom{D+j_{sa}-l_{sa}-s}{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}} \sum_{l_s=l}^{\binom{l_s+j_{sa}-l}{l_s+l_{sa}-D-1}} \sum_{n_i=n+k}^{\binom{n}{n_i-j_{ik}+1}} \sum_{n_{ik}=n+k-k_2-j_{ik}+1}^{\binom{n_{ik}+j_{ik}-j^{sa}-k_2}{n_{ik}+j_{ik}-j^{sa}-k_2}} \sum_{n_{sa}=n-j^{sa}+1}^{\binom{n_{sa}-1}{n_{sa}+j^{sa}-n-1}} \frac{(n_i - n_{ik} - 1)!}{(j_{sa} - j_{sa}^{ik} - 1)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \sum_{k=l}^{\binom{D+j_{sa}-l_{sa}-s}{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}} \sum_{l_s=l}^{\binom{l_s-l+1}{j^{sa}=l_i+n+j_{sa}-D-s}} \sum_{n_i=n+k}^{\binom{n}{n_i-j_s+1}} \sum_{n_{is}=n+k+j_{sa}^{ik}-j_{ik}}^{\binom{n_{is}+j_{sa}^{ik}-j_{ik}}{n_{is}+j_{sa}^{ik}-j_{ik}}}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{\binom{()}{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}$$

$$\frac{\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - \mathbb{k}_1 - 1)!}}{(D - l)!} \cdot \frac{(n - l)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n_{sa} + j_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} + j_{sa} - s > l_s \wedge$

$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} -$

$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\}$

$s \geq 5 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \dots + \mathbb{k}_2$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l} \sum_{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_s + n + j_{sa}^{ik} - D - 1)} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_i - j_{ik} - \mathbb{k}_1 + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{(l_{sa} + j_{sa}^{ik} - l - j_{sa} + 1)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - j_{sa} + j_{sa}^{ik} - j_{sa}^{ik})} \sum_{(n_i = n + \mathbb{k})} \sum_{(n_{ik} = n_{is} + j_{sa}^{ik} - \mathbb{k}_1)} \sum_{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - j^{sa} - s - \mathbb{k} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{sa}^{ik} - n_{sa} - j^{sa} - n - j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!} \cdot \frac{1}{(n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n - l \wedge l_s > D - l_i + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} - j_{sa} + j_{sa} - j_{sa} \wedge$$

$$j_{ik} - j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + j_{sa} > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \leq n - l \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_z S_{j_{ik}, j^{sa}}^{DOST} = \sum_{k=l} \sum_{\binom{()}{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_i+j_{sa}-l-s+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{\binom{(n_i-j_{ik}-\mathbb{k}_1+1)}{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}} \sum_{n_{sa}=n-j^{sa}+j_{sa}}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \dots)}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - \dots + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \dots - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \dots)!}$$

$$\frac{(n_{sa} - \dots)!}{(n_{sa} - j^{sa} - \dots - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - \dots - l + 1)!}{(l_{ik} - \dots - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + j_{sa} - \dots) (l_{sa} - s)!}{(D + j_{sa} - \dots - n - l_{sa}) (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l} \sum_{\binom{()}{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}} \sum_{j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}^{l_s+j_{sa}-l}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{\binom{(n_i-j_s+1)}{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{\binom{()}{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}$$

$$\frac{1}{(n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$



$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z S_{j_{ik}}^{l_{ik}} = \sum_{k=l}^{j_{sa}^{ik}-l-s} \sum_{(j_{ik}=l_i+n-k, k-D-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik}=l_{ik}+n-D)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{sa}-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j_{sa}^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j_{sa}^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}$$

$$\frac{1}{(s)!}$$

$$\frac{(l_s - 1)!}{(l_s + j_{ik} - l)! (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + l_i)!}{(D + j_{sa} + s - l + l_i - j_{sa}^{sa} + (n + j_{sa} - j_{sa}^{sa} - s)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j_{sa}^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa}^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j_{sa}^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa}^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa})) \wedge$$

$$D \geq n < n \wedge \mathbb{k} > \mathbb{k} \wedge$$

$$j_{sa}^{sa} = j_{sa}^{sa} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_2: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(j_{sa} + j_{sa}^{ik} - j_{sa})} \sum_{(j_{ik}=l_s + n + j_{sa}^{ik} - D - 1)}^{(j_{sa} + j_{sa}^{ik} - j_{sa})} \sum_{j_{sa}^{sa}=l_{sa} + n - D}^{l_s + j_{sa} - l}$$

$$\begin{aligned}
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=l}^{(l_s+1)-l} \sum_{j_{sa}^{ik}=n+j_{sa}^{ik}-D-1}^{l_{sa}-l+1} j^{sa}=l_s+j_{sa}-l+1 \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -
\end{aligned}$$

$$\sum_{k=l}^{(\cdot)} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\cdot)} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k+j_{sa}^{ik}-j_{sa})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-k_1}^{(\cdot)} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-k_2)}^{(\cdot)}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot k_1 - 2 \cdot k_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot k_1 - 2 \cdot k_2)!} \cdot \frac{1}{(n-s)!} \cdot \frac{(l_i-l-1)!}{(l_s+j_{sa}-j_{ik}-1) \cdot (j_{ik}-j_{sa}^{ik}-1)!} \cdot \frac{(D-l_i)!}{(n+l_{sa}+j_{sa}-n-l_i-j_{sa}^{ik}-1)! \cdot (n+j_{sa}-j^{sa}-s)!}$$

$$\begin{aligned} & ((D \geq n < n \wedge l_s > D - l_i + 1 \wedge \\ & j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - s \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 \leq l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee \\ & (D > n < n \wedge l_s > n + j_{sa} - s \wedge \\ & j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - s \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 \leq l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa})) \wedge \end{aligned}$$

$$D \geq n < n \wedge I = k > 0 \wedge j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$



$$\begin{aligned}
 f_{z} S_{j_{ik}, j^{sa}}^{DOST} = & \sum_{k=l}^{(l_{sa}+n+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{(j_{ik}=l_s+n+j_{sa}^{ik}-D-1)} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-l+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - 1)!}{(j_{ik} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa}^{ik} - l_{sa} - s)!}{(D + j_{sa}^{ik} - n_{sa} - s)! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{k=l}^{(l_s+j_{sa}^{ik}-l)} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{l_{sa}-l+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
 \end{aligned}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}+j_{sa}^{ik}-j_{ik})}^{(n_{is}+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}}^{(n_{ik}-1)} \sum_{(n_{ik}-j_{sa}-k_2)}^{( )}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^{ik} - n_{sa} - j_{sa}^{ik} - s - j_{sa}^{ik} - 2 \cdot k_1 - 2 \cdot k_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^{ik} - n_{sa} - j^{sa} - 2 \cdot j_{sa}^{ik} - 2 \cdot k_1 - 2 \cdot k_2)!}$$

$$\frac{1}{(n-s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j_{sa}^{ik} - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_i \leq l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} - j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_{ik} + j_{sa} - s \wedge$$

$$l_{ik} - j_{ik} + 1 = j_{sa}^{ik} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa}^{ik} - n \wedge l_i \leq D + s - n \wedge$$

$$D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$\begin{aligned}
 f_Z^{DOST} S_{j_{ik}, j_{sa}}^{DOST} &= \sum_{k=l}^{(j_{sa} + j_{sa}^{ik} - j_{sa})} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_s + j_{sa} - l} \sum_{j_{sa} = j_{sa} + 1} \\
 &\sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j_{sa}}^{n_{ik} + j_{ik} - j_{sa} - k_2} \\
 &\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 &\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!} \cdot \\
 &\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \\
 &\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 &\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - l)!}{(j_{ik} + j_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 &\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} + \\
 &\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{sa} - l + 1} \sum_{j_{sa} = l_s + j_{sa} - l + 1} \\
 &\sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{ik} + j_{ik} - j_{sa} - k_2} \\
 &\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 &\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!} \cdot \\
 &\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \\
 &\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
 \end{aligned}$$

GÜLDÜZ

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(\ )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\ )} \sum_{j^{sa}=j_{sa}+1}^{l_s+j_{sa}-l}$$

$$\sum_{n_i=n+l}^n \binom{n_i+l-1}{n_i+l-j_{ik}}$$

$$\sum_{n_{ik}=n_i+j_{sa}-l_{sa}-l_{ik}}^{(\ )} \sum_{j^{sa}=j_{sa}-l_{k_2}}^{(\ )} \binom{(\ )}{j^{sa}-l_{k_2}}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa} - n_{sa} - j^{sa} - s - j_{sa} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - 2 \cdot j_{sa} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!}$$

$$\frac{1}{(n-s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j_{sa} - s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l = l \wedge l_{sa} < D + j_{sa} - n \wedge$$

$$j_{sa}^{ik} - j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{ik} + 1 = j^{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge l = l > 0 \wedge$$

$$j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, l_{k_1}, j_{sa}^{ik}, \dots, l_{k_2}, j_{sa}, \dots, j_{sa}^l\} \wedge$$

$$s \geq 5 \wedge s = s + l \wedge$$

$$l_{k_2}: z = 2 \wedge l_{k_2} = l_{k_1} + l_{k_2} \Rightarrow$$

$$\begin{aligned}
f_Z S_{j_{ik}, j^{sa}}^{DOST} = & \left( \sum_{k=l} \sum_{(j_{ik}=j^{sa}+j_{sa}^{lk}-j_{sa})} \sum_{j^{sa}=j_{sa}+1}^{l_{ik}+j_{sa}-l-j_{sa}^{lk}+1} \right. \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_k-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
& \frac{(n - 1)!}{(n_i + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{lk})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{lk} - 1)!} \cdot \\
& \left. \frac{(D + j^{sa} - l_{sa} - 1)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \\
& \left( \sum_{k=l}^{(j^{sa}+j_{sa}-j_{sa}^{lk}-1)} \sum_{(j_{ik}=j_{sa}^{lk}+1)} \sum_{j^{sa}=j_{sa}+2}^{l_{ik}+j_{sa}-l-j_{sa}^{lk}+1} \right. \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_k-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{lk})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{lk} - 1)!} \cdot \\
& \left. \frac{(l_{sa} + j_{sa}^{lk} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{lk} - j_{ik} - j_{sa})!} \right)
\end{aligned}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_{sa}-l+1} \sum_{j^{sa}=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j^{sa} - l_{k_2})!} \cdot$$

$$\frac{(n_{sa} + j_{sa} - n - 1)!}{(j^{sa} - 1)!} \cdot$$

$$\frac{(l_{ik} - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(l_{sa} + j_{sa}^{ik})! \cdot (l_{ik} - j_{sa})!}{(j_{ik} + j_{sa} - j^{sa} - 1)! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\left( \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) -$$

$$\sum_{k=l}^{( )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{( )} \sum_{j^{sa}=j_{sa}+1}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{( )}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!}$$

$$\frac{1}{(n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - n \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_{zS}^{L_{j_{sa}^{ik}}} = \left( \sum_{k=l}^{(\cdot)} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{j^{sa}=j_{sa}+1}^{l_s+j_{sa}-l} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \right) \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\begin{aligned}
 & \left( \sum_{k=l}^{(j^{sa} + j_{sa}^{ik} - j_{sa} - 1)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)} \sum_{j^{sa} = j_{sa} + 2}^{l_s + j_{sa} - l} \right. \\
 & \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa}}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - 1)!}{(j_{ik} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \\
 & \frac{(D + j_{sa}^{ik} - l_{sa} - s)!}{(D + j_{sa}^{ik} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{sa} - l + 1} \sum_{j^{sa} = l_s + j_{sa} - l + 1} \\
 & \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}
 \end{aligned}$$

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$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \left( \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) -$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{j_{sa}^{ik}} j^{sa} = j_{sa}^{ik} + j_{sa} - j_{sa}^{ik}$$

$$\sum_{n = n + \mathbb{k}}^n \sum_{(n_{is} = n_{is} + 1)}^{(n_{is} + 1)} j_{ik}$$

$$\sum_{n_{ij} = n_{is} + j_{sa}^{ik} - \mathbb{k}_1}^{( )} \sum_{(j_{sa} = j_{sa} - \mathbb{k}_2)}^{( )}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa} - n_{sa} - j^{sa} - s - j_{sa} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - 2 \cdot j_{sa}^s - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}$$

$$\frac{1}{(n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j_{sa}^{ik} - s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s = l \wedge l_{sa} = D + j_{sa} - n \wedge$$

$$j_{sa}^{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s + l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
f_z S_{j_{ik}, j_{sa}}^{DOST} = & \left( \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \right. \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-l_{k_2}} \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - l_{k_2})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \\
& \frac{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}{(D + j_{sa} - n - l_{sa} - 1)! \cdot (n + j_{sa} - j_{sa} - s)!} \Bigg) + \\
& \left( \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{l_{sa}-l+1} \right. \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-l_{k_2}} \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - l_{k_2})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \Bigg)
\end{aligned}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n_i+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_2} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-\mathbb{k}_2)}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - j_{sa}^{ik} - 2 \cdot \mathbb{k}_2 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - j_{sa}^{ik} - 2 \cdot \mathbb{k}_2 - 2 \cdot \mathbb{k}_2)!} \cdot \frac{1}{(n-s)!}$$

$$\frac{(n_{is} - l - 1)!}{(n_{is} + j_{sa}^{ik} - j_{sa}^{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(n - l_i)!}{(D + j^{sa} + \dots - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l = 1 \wedge l_s \leq D - n - 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + \dots \leq j^{sa} \leq j_{sa} + j_{sa}^{ik} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - n \wedge$$

$$D > n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s = \{j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
f_z S_{j_{ik}, j^{sa}}^{DOST} = & \left( \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}} \right. \\
& \sum_{n_i = n + \mathbb{k}_1}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa}}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \left. \frac{(D + j_{sa} - l_{sa} - 1)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \\
& \left( \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik} + 1}^{l_{sa} - l + 1} \right. \\
& \sum_{n_i = n + \mathbb{k}_1}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \\
& \left. \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \right)
\end{aligned}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n - k - j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^{ik} - j_{sa}^{ik} - k_1} \sum_{(n_{ik} + j_{ik} - j_{sa}^{ik} = n - k_2)}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - j_{sa}^{ik} - 2 \cdot k_1 - 2 \cdot k_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n_{sa} - 2 \cdot j_{sa}^{ik} - 2 \cdot k_1 - 2 \cdot k_2)!} \cdot \frac{1}{(n - s)!}$$

$$\frac{(j_{sa}^{ik} - l - 1)!}{(j_{sa}^{ik} - j_{sa}^{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{1}{(n - l_i)!}$$

$$\frac{1}{(D + j^{sa} + n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq 1 \wedge l_s \leq D - n - 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa}^{ik} + j_{sa}^{ik} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa}^{ik} \leq n + j_{sa} - 1 \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa}^{ik} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - n \wedge l_{sa} \leq D + s - n \wedge$$

$$D > n \wedge n \wedge I = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s \in \{j_{sa}^{ik} - 1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$\begin{aligned}
 f_{z^S}^{DOST} &= \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{sa} - l + 1} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}} \\
 &\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa}}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \\
 &\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 &\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 &\frac{(n_i - 1)!}{(n_i + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 &\frac{(j_{ik} - j_{sa}^{ik})!}{(n_i - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 &\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - 1)!}{(j_{ik} + j_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 &\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 &\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{sa} - l + 1} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}} \\
 &\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)} \\
 &\sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - \mathbb{k}_1}^{(\quad)} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\quad)} \\
 &\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!} \cdot \\
 &\frac{1}{(n - s)!} \cdot \\
 &\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
 \end{aligned}$$

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$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz S_{j_{ik} j_{sa}}^{DOS} = \left( \sum_{k=l} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{j^{sa}=l_{sa}+n-D}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \right) + \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\begin{aligned}
 & \left( \sum_{k=l}^{(j^{sa} + j_{sa}^{ik} - j_{sa} - 1)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)} \sum_{j^{sa} = l_{sa} + n - D}^{l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1} \right. \\
 & \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa}}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa} - l_{ik} - 1)!}{(j_{ik} + j_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{k=l}^{(l_{ik} - l + 1)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{sa} - l + 1} \sum_{j^{sa} = l_{ik} + j_{sa} - l - j_{sa}^{ik} + 2} \\
 & \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}
 \end{aligned}$$

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$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa}^{ik} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \left( \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \right) -$$

$$\sum_{k=l} \sum_{\binom{()}{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})}} \sum_{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}^{j_{sa}^{ik}+l+n+j_{sa}-D-s}$$

$$\sum_{n=n+l_{ik}}^n \sum_{\binom{(n_{is}=n+l_{ik})}{(n_{is}=n+l_{ik})}} \sum_{j_{ik}}$$

$$\sum_{\binom{()}{(n_{ij}=n_{is}+j_{sa}^{ik}-l_{ik}-l_{k_1})}} \sum_{\binom{()}{(n_{ik}+j_{sa}-l_{k_2})}}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa} - n_{sa} - j_{sa}^{ik} - s - j_{sa}^{ik} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j_{sa}^{ik} - 2 \cdot j_{sa}^{ik} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!}$$

$$\frac{1}{(n - s)!}$$

$$(l_s - l - 1)!$$

$$(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!$$

$$(D - l_i)!$$

$$(D + j_{sa}^{ik} - s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!$$

$$D \geq n < n \wedge l_s = l \wedge l_s = D - n - l \wedge$$

$$D + j_{sa}^{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 2 \leq l \leq l - 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - l_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge l = l_{ik} > 0 \wedge$$

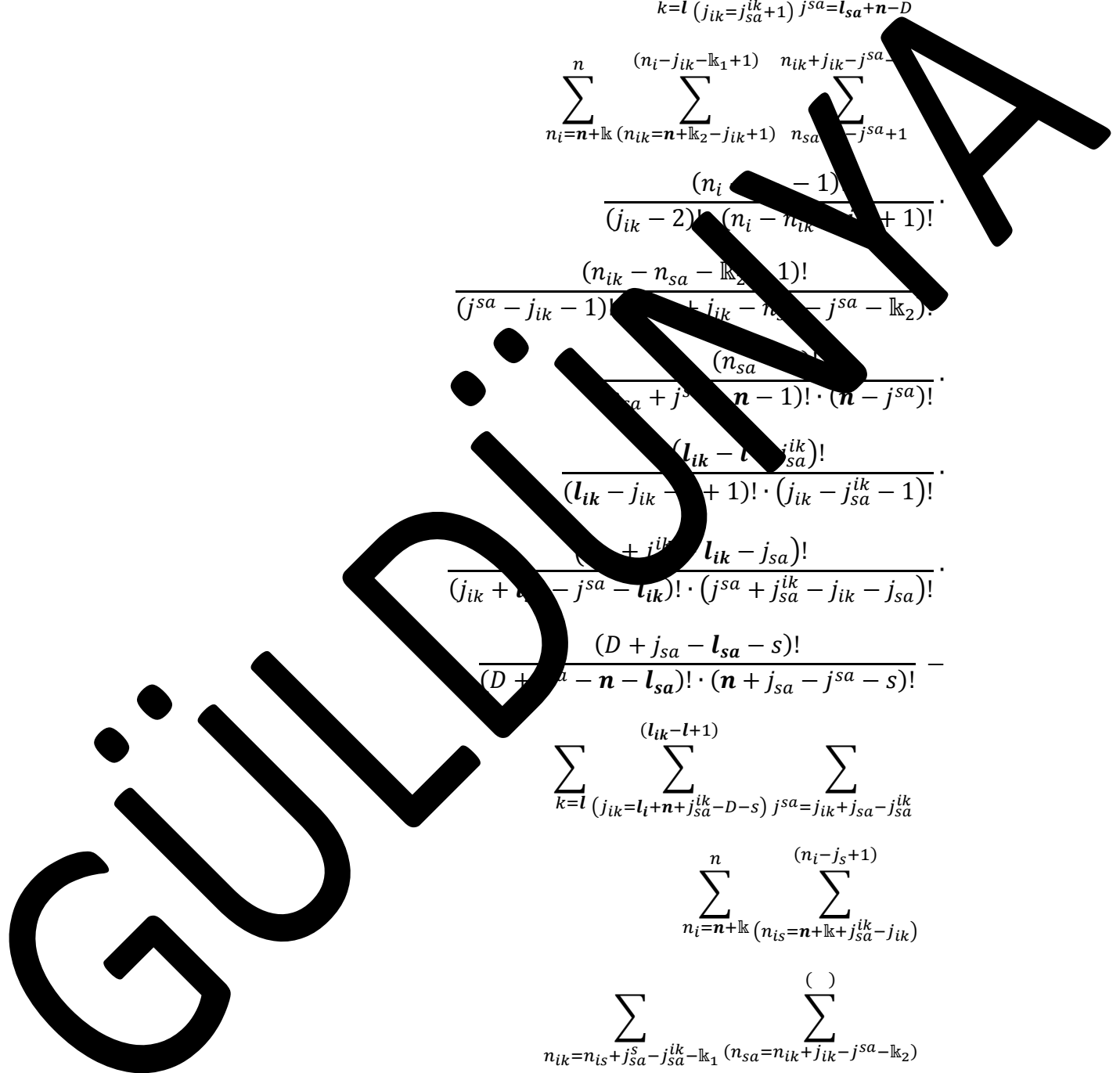
$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, l_{k_1}, j_{sa}^{ik}, \dots, l_{k_2}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$s \geq 5 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_z S_{j_{ik} j_{sa}}^{DOST} = \sum_{k=1}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_{sa}-l+1} \sum_{j_{sa}=l_{sa}+n-D}^{n} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}} \frac{(n_i-1)}{(j_{ik}-2)! (n_i-n_{ik}+1)!} \cdot \frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j_{sa}-j_{ik}-1)! (j_{ik}-n_{sa}-j_{sa}-\mathbb{k}_2)!} \cdot \frac{(n_{sa})!}{(n_{sa}+j_{sa}-n-1)! \cdot (n-j_{sa})!} \cdot \frac{(l_{ik}-l_{sa}^{ik})!}{(l_{ik}-j_{ik}-1)! \cdot (j_{ik}-j_{sa}^{ik}-1)!} \cdot \frac{(j_{ik}+l_{sa}^{ik}-j_{sa}-l_{ik})!}{(j_{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot \frac{(D+j_{sa}-l_{sa}-s)!}{(D+j_{sa}-n-l_{sa})! \cdot (n+j_{sa}-j_{sa}-s)!} \sum_{k=1}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{n} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{(n_i-j_s+1)} \sum_{n_{is}=n+\mathbb{k}}^{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})} \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1}^{(\quad)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(\quad)} \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!} \cdot \frac{1}{(n-s)!}$$



$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i_l \wedge l_s \leq D - n + 1 \wedge$$

$$2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2$$

$$S_{j_{ik}, j_{sa}}^{DOST} = \left( \sum_{k=l} \sum_{\binom{()}{j_{ik}, j_{sa}}} \sum_{\binom{l_s + j_{sa} - l}{j_{sa} = l_{sa} + n - D}} \sum_{\binom{n}{n_i = n + \mathbb{k}}} \sum_{\binom{(n_i - j_{ik} - \mathbb{k}_1 + 1)}{n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1}} \sum_{\binom{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}{n_{sa} = n - j^{sa} + 1}} \right)$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\left( \sum_{k=l}^{(j^{sa} + j_{sa}^{ik} - j_{sa} - 1)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_s + j_{sa} - l} \sum_{j^{sa} = l_{sa} + n - D}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_{ik} - l_{sa}^{ik})!}{(l_{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(l_{ik} - j_{sa}^{ik})!}{(j_{ik} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

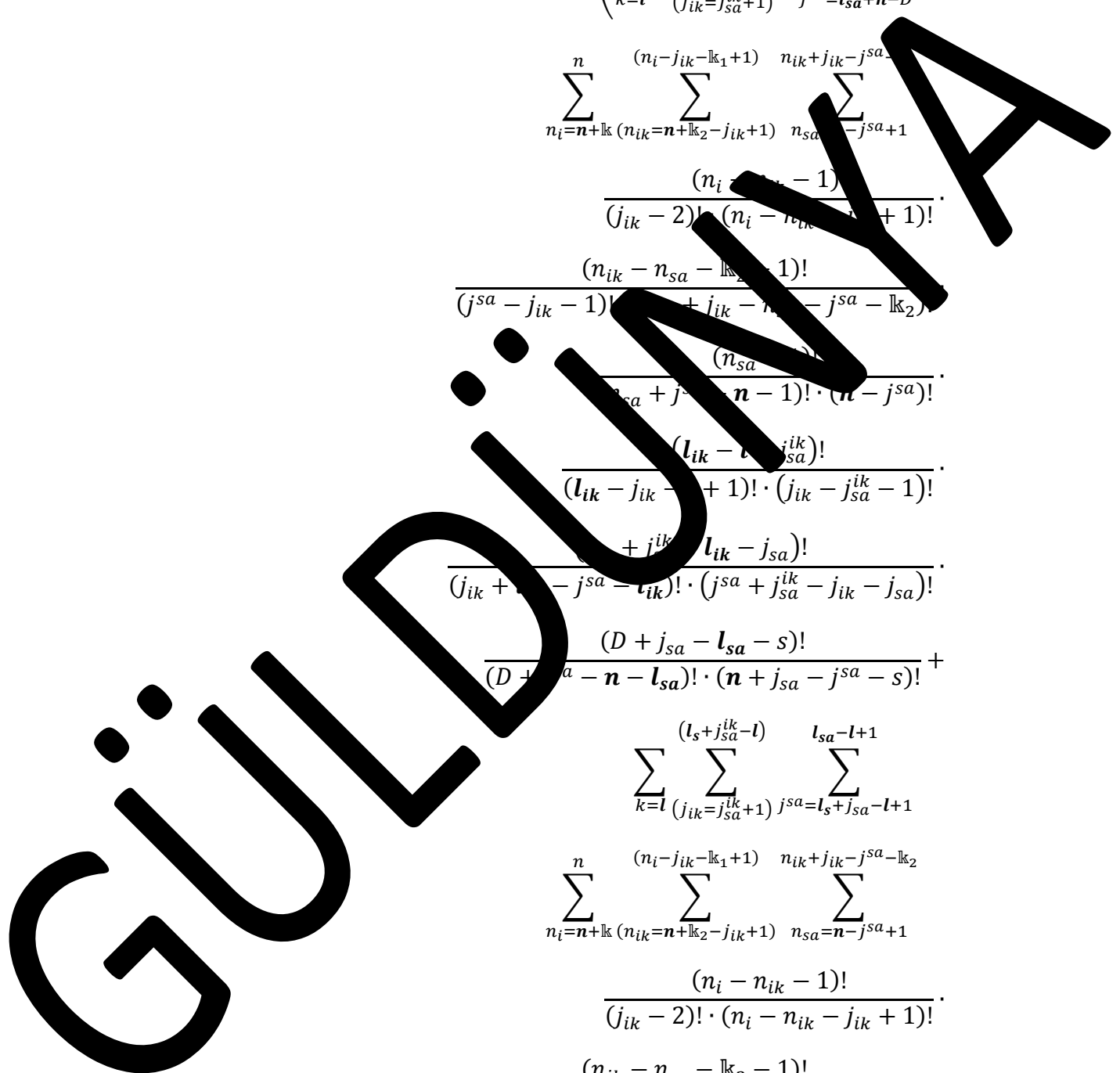
$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{sa} - l + 1} \sum_{j^{sa} = l_s + j_{sa} - l + 1}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$



$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{\binom{()}{l_s - a - l}} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(l_i+n+l_{sa}-D-s)}$$

$$\sum_{(n+l_{sa}+l_{sa}^{ik}-j_{ik})} \sum_{(n_i-j_{sa}^{ik})}$$

$$\sum_{(n_{ik}=n_{is}+j_{sa}^{ik}-l_{k_1})} \sum_{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!}{(2 \cdot n_{is} + 2 \cdot n_{sa} - n_{sa} - j^{sa} - n - j_{sa}^{ik} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!} \cdot \frac{1}{(n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$l \geq n < n \wedge l \neq i \wedge l \leq D - n + 1 \wedge$$

$$D + l_{sa} + j_{sa}^{ik} - j_{sa}^{ik} + 2 \leq l \leq i - 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} - j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{sa} + j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z S_{j_{ik} j_{sa}}^{DOST} = \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{sa} - l + 1} \sum_{j_{sa} = l_{sa} + n}^{l_{sa} - l + 1}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{(n_{sa} = n - j_{sa} - k_2)}^{(n_{ik} + 1 - j_{sa} - k_2)}$$

$$\frac{(n_{sa} - n_{ik} - 1)!}{(j_{sa} - 2)! \cdot (n_{sa} - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - j_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - k_2)!}$$

$$\frac{(n_{sa} - n_{sa} - n - 1)!}{(n_{sa} - n_{sa} - n - 1)! \cdot (n - j_{sa})!}$$

$$\frac{(n_{sa} - l - j_{sa}^{ik})!}{(n_{sa} - l - j_{sa}^{ik})! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

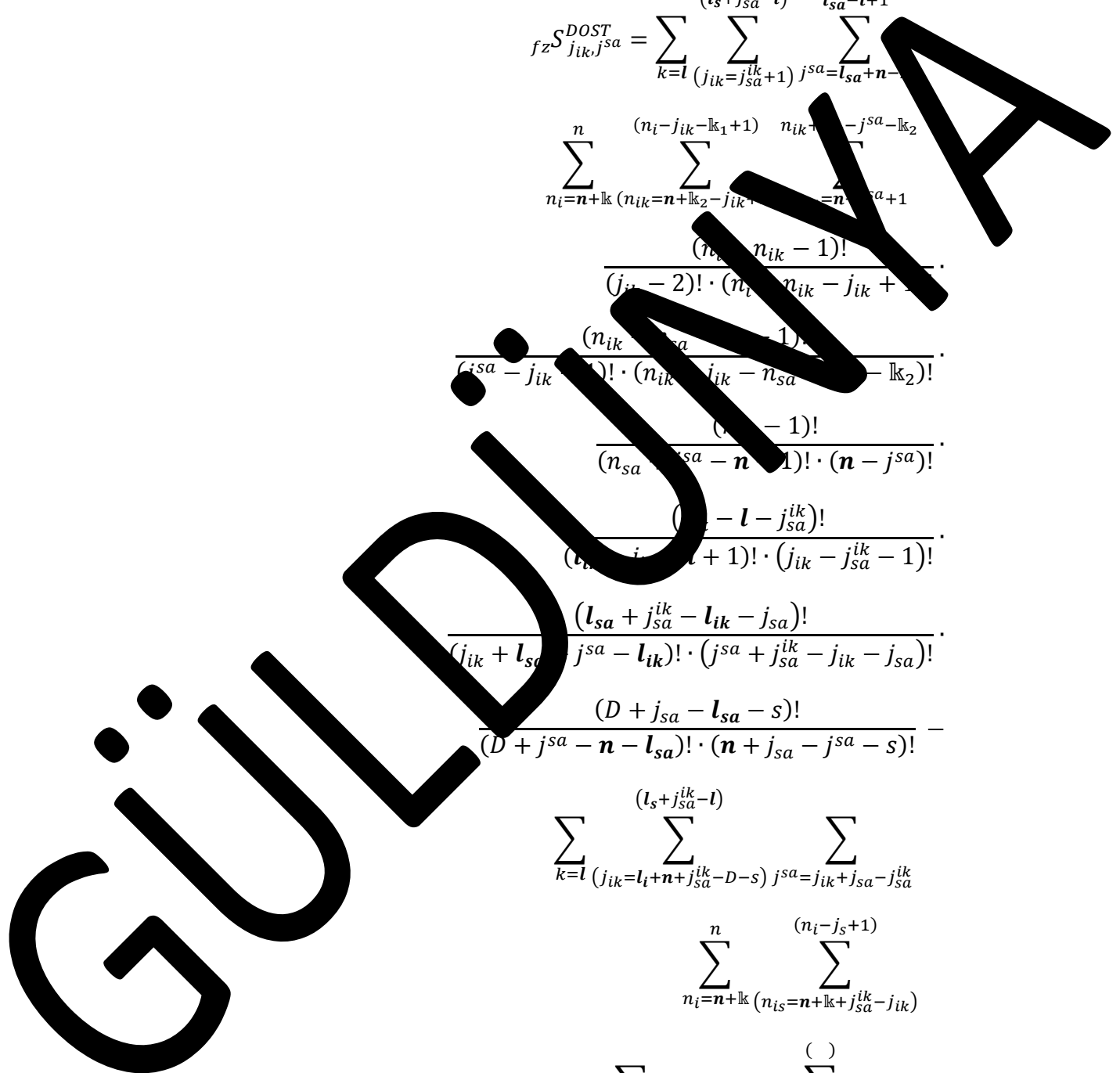
$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)}^{(l_s + j_{sa}^{ik} - l)} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - k_1}^{( )} \sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - k_2)}^{( )}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - s - j_{sa}^{ik} - 2 \cdot k_1 - 2 \cdot k_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot k_1 - 2 \cdot k_2)!}$$



$$\frac{1}{(n-s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa})!}$$

$$D \geq n < n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

$$2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, a\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z^{S_{j_{ik}}}^{DOST} = \left( \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-k_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \right)$$

$$\begin{aligned}
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \\
 & \left( \sum_{k=l}^{(l_{sa} + n + j_{sa}^{ik} - D - j_{sa} - 1)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{sa} - l + 1} \sum_{j^{sa} = l_{sa} + n - D}^{n_{sa} - j_{sa} - 1} \right. \\
 & \sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - k_2} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \\
 & \sum_{k=l}^{(l_{ik} - l + 1)} \sum_{(j_{ik} = l_{sa} + n + j_{sa}^{ik} - D - j_{sa})}^{l_{sa} - l + 1} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik} + 1}^{n_{sa} - j_{sa} - 1} \\
 & \sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - k_2} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!}
 \end{aligned}$$

GÜLDENWA







$$\begin{aligned}
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_s + n + j_{sa}^{ik} - D - j_{sa})} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik} + \dots)} \\
 & \sum_{n_i = n - \dots}^n \sum_{n_{ik} = n + \dots}^{(n - j_{ik} - 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{(n - j_{ik} - j^{sa} - k_2)} \\
 & \frac{(n_i - \dots - 1)!}{(j_{ik} - \dots) \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(j_{sa} - \dots - k_2 - 1)!}{(j^{sa} - \dots - 1)! \cdot (j_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) - \\
 & \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik} + \dots)} \\
 & \sum_{n_i = n + k}^n \sum_{(n_{is} = n + k + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)}
 \end{aligned}$$

GÜLDÜZMAYA

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{\binom{()}{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}$$

$$\frac{\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - \mathbb{k}_1 - 1)!}}{(D - l)!} \cdot \frac{(n - l)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n_{sa} + j_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$

$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1$

$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\}$

$s \geq 5 \wedge s = \dots + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \dots + \mathbb{k}_2 = \dots$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik}, \dots, j_{sa} = j_{ik} - j_{sa}^{ik})} \dots \sum_{n_i = n + \mathbb{k}}^{(n_i - j_{sa}^{ik})} \sum_{(n_{ik} = n_{is} + j_{sa}^{ik} - \mathbb{k}_1, \dots, n_{ik} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)} \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - j^{sa} - s - \mathbb{k} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{sa}^{ik} - n_{sa} - j^{sa} - n - j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!} \cdot \frac{1}{(n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n \wedge l \neq i \wedge l \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa}^{ik} \wedge j_{sa}^{ik} \leq j_{sa}^{ik} \wedge$$

$$j_{ik} - j_{sa}^{ik} \leq j_{sa}^{ik} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge l_i \leq D + s - n \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$s \geq 5 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_z S_{j_{ik}, j^{sa}}^{DOST} = \sum_{k=l}^{(l_{sa} + j_{sa}^{ik} - l - j_{sa} + 1)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa}}$$

$$\frac{(n_i - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

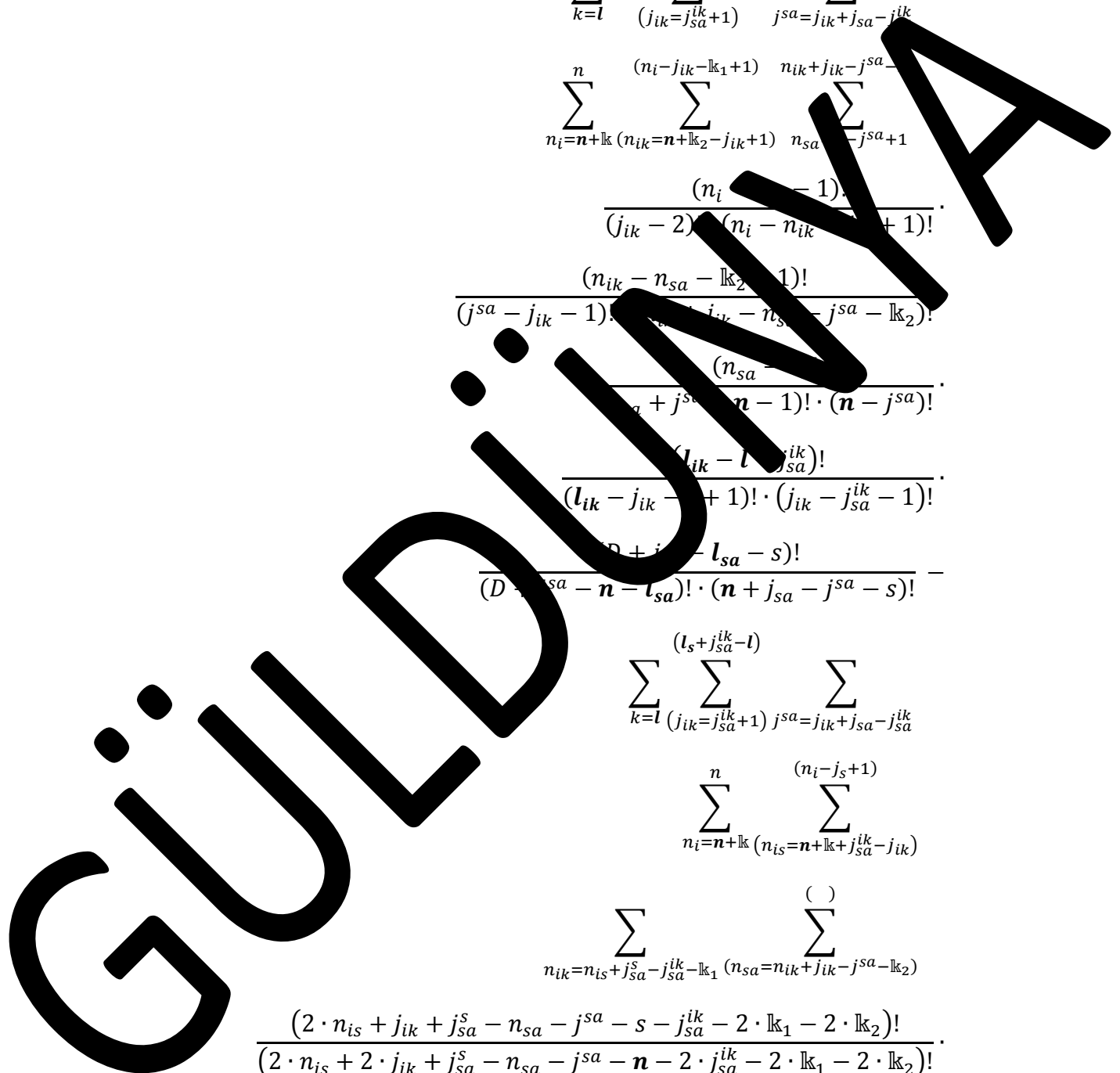
$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - \mathbb{k}_1} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{( )}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}$$

$$\frac{1}{(n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$



$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\left( (D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge \right.$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + 1 \wedge$$

$$k_2 : z = 2 \wedge k_2 = k_1 + 1 \Rightarrow$$

$$fz^{DOST}_{j_{ik}, j^{sa}} = \sum_{k=l}^{(j^{sa} + j_{sa}^{ik} - j_{sa})} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1} \sum_{j^{sa} = l_i + n + j_{sa} - D - s}^{n_{ik} + j_{sa} - l - j_{sa}^{ik} + 1}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - k_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_i+j_{sa}-s+1} \sum_{(j_{sa}=l_i+j_{sa}-j_{sa}^{ik}+2)}^{n_{ik}+j_{ik}-l_{k_2}}$$

$$\sum_{n_i=n+l_{k_1}}^n \sum_{(n_{ik}=n_{sa}-l_{k_2})}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{(n_{sa}=n-j^{sa}+1)}^{n_{ik}+j_{ik}-l_{k_2}}$$

$$\frac{(n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!}{(j_{ik} - l_{k_1} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - l_{k_1} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - l_{k_2})!}$$

$$\frac{(n_{sa} - 1)!}{(j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

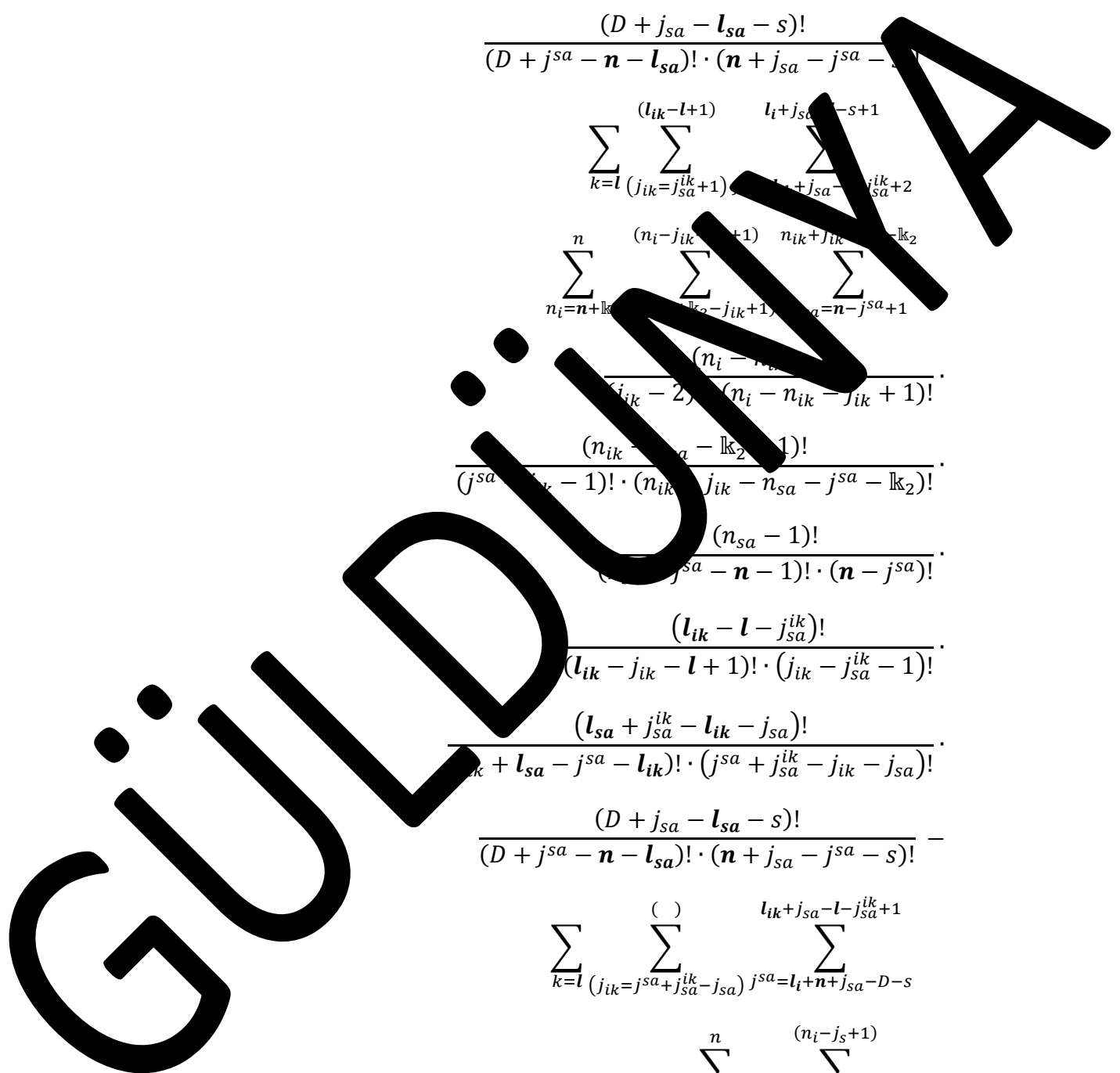
$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{( )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}$$

$$\sum_{n_i=n+l_{k_1}}^n \sum_{(n_{is}=n+l_{k_1}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{( )}$$





$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!} \cdot \frac{1}{(n-s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik})!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} \geq l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} \geq l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \wedge$$

$$D \geq n < n \wedge l = i > 0 \wedge$$

$$j_{sa} \leq j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^{ik}, \dots, j_{sa}^i\} \wedge$$

$$s \geq j_{sa}^{ik} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik} j_{sa}}^{DOST} = \sum_{k=l}^{(l_i+n+j_{sa}^{ik}-D-s-1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_i+j_{sa}-l-s+1} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}$$

$$\begin{aligned}
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa})!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{(l_{ik}-1)} \sum_{(j_{ik}=l_i + j_{sa}^{ik} - D - s)}^{l_i + j_{sa}^{ik} - s + 1} \sum_{j^{sa}=j_{ik} + j_{sa} - j_{sa}^{ik}} \\
 & \sum_{n_i=n+\mathbb{k}_1}^n \sum_{(n_i - j_{ik} - \mathbb{k}_1 + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa}=n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i + n + j_{sa}^{ik} - D - s)}^{l_i + j_{sa}^{ik} - D - s} \sum_{j^{sa}=j_{ik} + j_{sa} - j_{sa}^{ik}}
 \end{aligned}$$

GÜLDENWA

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}$$

$$\frac{1}{(n-s)!}$$

$$\frac{(l_s - 1)!}{(l_s + j_{ik} - l)! (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + l_i)!}{(D + j_{sa} + s - l_i - j_{sa}^{ik} + 1) (n + j_{sa} - j^{sa} - s)!}$$

- $D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1$
- $j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$
- $j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$
- $l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_{sa} + j_{sa} - s = l_{sa} \wedge$
- $D + j_{sa} - n < l_s \leq D + l_s + j_{sa} - n - 1 \wedge$
- $D \geq n < n - l = \mathbb{k} > 0 \wedge$
- $j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{ik} < j_{sa}^{ik} - 1 \wedge$
- $s: \{j_{sa}^s, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^s, \dots, j_{sa}^i\} \wedge$
- $s \geq 5 \wedge s = \dots + \mathbb{k} \wedge$
- $\mathbb{k} = \dots \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_s+j_{sa}-l} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\begin{aligned}
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^n \sum_{j_{ik}=j_{sa}^{ik}+j_{sa}^{ik}-j_{sa}}^{(j_{sa}^{ik}-l)} \sum_{j_{sa}=l_s+j_{sa}-l+1}^{l_i+j_{sa}-s+1} \\
 & \sum_{n_i=n+\mathbb{k}_1}^n \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{(n_i-j_{ik})-\mathbb{k}_1+1} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^n \sum_{j_{ik}=j_{sa}^{ik}+j_{sa}^{ik}-j_{sa}}^{( )} \sum_{j_{sa}=l_i+n+j_{sa}-D-s}^{l_s+j_{sa}-l}
 \end{aligned}$$

GUIDANCE

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}$$

$$\frac{1}{(n-s)!}$$

$$\frac{(l_s - 1)!}{(l_s + j_{ik} - l)! (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D - l_i + s - 1)! (l_i - j_{sa}^{ik})! (n + j_{sa} - j^{sa} - s)!}$$

- $D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1$
- $j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$
- $j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$
- $l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_{sa} + j_{sa} - s = l_{sa} \wedge$
- $D + j_{sa} - n < l_s \leq D + l_s + j_{sa} - n - 1 \wedge$
- $D \geq n < n - 1 = \mathbb{k} > 0 \wedge$
- $j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} \leq j_{sa} - 1 \wedge j_{sa}^{ik} \leq j_{sa}^{ik} - 1 \wedge$
- $s: \{j_{sa}^s, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^s, \dots, j_{sa}^i\} \wedge$
- $s \geq 5 \wedge s = \dots + \mathbb{k} \wedge$
- $\mathbb{k} = \dots \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_i+n+j_{sa}^{ik}-D-s-1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_i+j_{sa}-l-s+1} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\begin{aligned}
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)}^{l_i + j_{sa}^{ik} - s + 1} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \\
 & \sum_{n_i = n + \mathbb{k}_1}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)}^{l_i + j_{sa}^{ik} - s + 1} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}
 \end{aligned}$$

GUIDANCE

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}$$

$$\frac{1}{(n-s)!}$$

$$\frac{(l_s - 1)!}{(l_s + j_{ik} - l)! (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D - l_i - j_{sa}^s + s - 1)! (l_i - j_{sa}^s - j^{sa} - s)!}$$

- $D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1$
- $j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$
- $j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$
- $l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_{sa} + j_{sa} - s > l_{sa} \wedge$
- $l_i \leq D + s - n$
- $D \geq n < n = \mathbb{k} > 1 \wedge$
- $j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} \leq j_{sa} - 1 \wedge j_{sa}^{ik} \leq j_{sa}^{ik} - 1 \wedge$
- $s: \{j_{sa}^s, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^s, \dots, j_{sa}^i\} \wedge$
- $s \geq 5 \wedge s = \dots + \mathbb{k} \wedge$
- $\mathbb{k} = \dots \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})} \sum_{j_{sa}^{ik}=j_{sa}+1}^{(l_{ik}+j_{sa}-l-j_{sa}^{ik}+1)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa} - 1)!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa})!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{(n_i - j_s + 1)} \sum_{(j_{ik} = j_{sa}^{ik} + j_{sa} - l - j_{sa}^{ik} + 1)} \sum_{(n_{is} = n + \mathbb{k} + j_{sa}^{ik} - j_{ik})} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \frac{(2 \cdot n_{is} + j_{ik} - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^{ik} - n - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!} \cdot \frac{1}{(n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_{sa} + s - n - j_{sa} \wedge$$



$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik})} \sum_{(j_{sa}=j_{sa}^{ik}+1)} \binom{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}{j_{sa}^{ik}-j_{sa}} \sum_{n_i=n+\mathbb{k}_1}^n \sum_{(n_i-j_{ik}+1)} \sum_{(n_{is}=n+\mathbb{k}_1+j_{sa}^{ik}-j_{ik})} \sum_{(n_{sa}=n-j_{sa}+1)} \sum_{(n_{sa}+j_{ik}-\mathbb{k}_2)} \frac{(n_i-j_{ik}+1)!}{(j_{ik}-2)! \cdot (n_i-n_{ik}-j_{ik}+1)!} \cdot \frac{(n_{ik}-n_{sa}-\mathbb{k}_2+1)!}{(j_{sa}^{ik}-1)! \cdot (n_{ik}-j_{ik}-n_{sa}-j_{sa}-\mathbb{k}_2)!} \cdot \frac{(n_{sa}-1)!}{(j_{sa}-n-1)! \cdot (n-j_{sa})!} \cdot \frac{(l_{ik}-l-j_{sa}^{ik})!}{(l_{ik}-j_{ik}-l+1)! \cdot (j_{ik}-j_{sa}^{ik}-1)!} \cdot \frac{(D+j_{sa}-l_{sa}-s)!}{(D+j_{sa}-n-l_{sa})! \cdot (n+j_{sa}-j_{sa}-s)!} \sum_{k=l} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(j_{sa}=l_i+n+j_{sa}-D-s)} \binom{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}{j_{sa}^{ik}-j_{sa}} \sum_{n_i=n+\mathbb{k}_1}^n \sum_{(n_{is}=n+\mathbb{k}_1+j_{sa}^{ik}-j_{ik})} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)} \binom{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}{j_{sa}^{ik}-j_{sa}}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}$$

$$\frac{1}{(n-s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa})!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$j_{ik, j_{sa}}^{OST} = \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-k_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n_i+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_2} \sum_{(n_{sa}=n_{ik}+j_{ik}-\mathbb{k}_2)} \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - j_{sa}^{ik} - 2 \cdot \mathbb{k}_2 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - j_{sa}^{ik} - 2 \cdot \mathbb{k}_2 - 2 \cdot \mathbb{k}_2)!} \cdot \frac{1}{(n-s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{sa}^{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{l_i!}{(D + j^{sa} + \dots - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq l \wedge l_s \leq D - j_{sa} - 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - j_{sa}^{ik} -$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_s + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n - l_i \leq D + j_{sa} + s - n - 1 \wedge$$

$$D \geq n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i \rightarrow j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$\{j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
 f_z S_{j_{ik} j_{sa}}^{DOST} &= \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \\
 &\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}^{ik}}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 &\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} + j_{ik} + 1)!} \cdot \\
 &\frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j^{sa} - l_{k_2})!} \cdot \\
 &\frac{(n_i + j^{sa} - n - 1)! \cdot (n - j^{sa} - 1)!}{(n_i - j_{ik} - l_{k_1} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 &\frac{(D - j_{sa} - l_{sa} - s)!}{(D - j^{sa} - n - l_{sa} - s)! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 &\sum_{k=l}^{(l_{ik}-l)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \\
 &\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 &\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{()} \\
 &\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!} \cdot \\
 &\frac{1}{(n - s)!} \cdot \\
 &\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 &\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

GÜLDEN

$$D \geq n < n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_{z_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{sa} + j_{sa}^{ik} - j_{sa} + 1)} \sum_{(j_{ik} - j_{sa}^{ik} + 1)}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}^{(j_{sa} - j_{sa}^{ik} + 1)}$$

$$\sum_{n_i = n + k}^{(n_i - j_{sa} - k_1 + 1)} \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_{ik} + j_{ik} - j_{sa} - k_2)} \sum_{n_{sa} = n - j_{sa} + 1}^{(n_{sa} - j_{sa} + 1)}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} -$$

$$\sum_{k=l}^{(l_{ik} - l + 1)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)}^{(l_{ik} - l + 1)} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{()}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}$$

$$\frac{1}{(s)!}$$

$$\frac{(l_s - 1)!}{(l_s + j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + l_i)!}{(D + s - l_i - j_{sa}^{ik} + j_{sa} - s)!}$$

$((D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1) \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_{sa} + j_{sa} - s = l_{sa} \wedge$

$l_i \leq D + s - n) \wedge$

$((D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1) \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n_{sa} + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_i \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$

$l_i \leq D + s - n) \wedge$

$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 5 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$\begin{aligned}
f_z S_{j_{ik}, j_{sa}}^{DOST} &= \sum_{k=l} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(j^{sa}+j_{sa}^{ik}-j_{sa})} l_{ik}+j_{sa}-l-j_{sa}^{ik}+1 \\
&\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}}^{n_{ik}+j_{ik}-j_{sa}-l_{k_2}} \\
&\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
&\frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
&\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
&\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
&\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - 1)!}{(j_{ik} + j_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
&\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
&\sum_{k=l} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(l_{ik}-l+1)} \sum_{j_{sa}=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2}^{l_{sa}-l+1} \\
&\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-l_{k_2}} \\
&\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
&\frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
&\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
&\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
\end{aligned}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(\quad)} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{j^{sa}=j_{sa}+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_i=j_{sa}+1)}^{(n_i+l_k+1)} \sum_{(n_i=j_{sa}-j_{ik})}$$

$$\sum_{n_{ik}=n_i+j_{sa}^{ik}-l_{ik}-k_1}^{(\quad)} \sum_{(n_{ik}=j^{sa}-k_2)}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa} - n_{sa} - j^{sa} - s - j_{sa} - 2 \cdot k_1 - 2 \cdot k_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - 2 \cdot j_{sa} - 2 \cdot k_1 - 2 \cdot k_2)!}$$

$$\frac{1}{(n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$(D \geq n < n \wedge l_i \neq l_s \wedge l_i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l_i \neq l_s \wedge l_i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$



$$l_i \leq D + s - n) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik} j_{sa}}^{DOST} = \sum_{k=l}^{(l_{ik}-l+1)} \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{sa}+1} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{l_{sa}+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik}}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{j_{sa}+1}^{(n_{is}+j_{ik}-j_{sa}-\mathbb{k}_2)} \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-2)! \cdot (n_{is}-n_{ik}+1)!} \cdot \frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(n_{is}-j_{ik}-1)! \cdot (n_{is}-j_{ik}-n_{sa}-j_{sa}-\mathbb{k}_2)!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j_{sa}-n-1)! \cdot (n-j_{sa})!} \cdot \frac{(l_{ik}-l-j_{sa}^{ik})!}{(l_{ik}-j_{ik}-l+1)! \cdot (j_{ik}-j_{sa}^{ik}-1)!} \cdot \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j_{sa}-l_{ik})! \cdot (j_{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot \frac{(D+j_{sa}-l_{sa}-s)!}{(D+j_{sa}-n-l_{sa})! \cdot (n+j_{sa}-j_{sa}-s)!} \sum_{k=l}^{(l_{ik}-l+1)} \sum_{j_{ik}=j_{sa}^{ik}+1}^{(l_{ik}-l+1)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{(l_{sa}+1)} \sum_{n_i=n+\mathbb{k}}^n \sum_{n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik}}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}$$

$$\frac{(n - l)!}{(l_s - l - 1)! \cdot (j_{ik} - l - \mathbb{k}_1 - 1)!} \cdot \frac{(D - l)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (j_{sa} - j^{sa} - l)!}$$

$$((D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + j_{sa} - n - 1)$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$D \geq n < n \wedge \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq s \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z^{S_{j_{ik}, j_{sa}^{sa}}} = \sum_{k=l}^{(j^{sa} + j_{sa}^{ik} - j_{sa})} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=l_{sa}+n-D}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_{ik}-l_{k_1}+1) \\ (n_{ik}=n+l_{k_2}-j_{ik}+1)}} \sum_{\substack{n_{ik}+j_{ik}-j^{sa}-l_{k_2} \\ n_{sa}=n-j^{sa}+1}} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{\substack{(l_{ik}-1) \\ (j_{sa}^{ik}+1)}} \sum_{\substack{l_{sa}-l+1 \\ j^{sa}=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2}} \\
 & \sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_{ik}-l_{k_1}+1) \\ (n_{ik}=n+l_{k_2}-j_{ik}+1)}} \sum_{\substack{n_{ik}+j_{ik}-j^{sa}-l_{k_2} \\ n_{sa}=n-j^{sa}+1}} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -
 \end{aligned}$$

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$$\sum_{k=l} \sum_{\binom{()}{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}} \sum_{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} j^{sa} = l_i + n + j_{sa} - D - s$$

$$\sum_{n_i=n+l_k}^n \sum_{\binom{(n_i-j_s+1)}{n_{is}=n+l_k+j_{sa}^{ik}-j_{sa}^{ik}}}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}} \sum_{\binom{()}{n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}^{ik}-l_{k_2}}}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!}$$

$$\frac{1}{(n-s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa} - j_{ik} - 1) \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$(D - l_i)!$$

$$\frac{(n + j^{sa} + j_{sa} - n - l_i - j_{sa} - 1)! \cdot (n + j_{sa} - j^{sa} - s)!}{(n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l \neq l_i \wedge l \leq D - n + 1) \vee$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_i \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq l_i \wedge l \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$D \geq n < n \wedge l = l_i \wedge l > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz S_{j_{ik} j_{sa}}^{DOST} = \sum_{k=l}^{(l_{sa}+n+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_{sa}-l+1} \sum_{j_{sa}=l_{sa}+n-1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(n - l - j_{sa}^{ik})!}{(l_{sa} + j_{sa} - n + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} +$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})}^{l_{sa}-l+1} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-l_{sa})} \sum_{(j_{sa}=j_{ik}+j_{sa}^{ik}-j_{sa}^{ik})} \sum_{(n_i-j_{sa})} \sum_{(n_i=n+l_k)} \sum_{(n_i+l_k+j_{sa}^{ik}-j_{ik})} \sum_{(n_{ik}=n_{is}+j_{sa}^{ik}-l_{k_1})} \sum_{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - l_{sa} - j^{sa} - s - l_{k_1} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!}{(2 \cdot n_{is} + 2 \cdot j_{sa}^{ik} - n_{sa} - j^{sa} - n - j_{sa}^{ik} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!} \frac{1}{(n-s)!} \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \frac{(D - l_i)!}{(j_{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$(D \geq n < n \wedge l \neq l_i \wedge l_s \leq D - n + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$j_{sa}^{ik} - l_{sa} > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$

$l_i \leq D + s - n) \vee$

$(D \geq n < n \wedge l \neq l_i \wedge l_s \leq D - n + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$l_{sa} \leq D + j_{sa} - n \wedge l_i \leq D + s - n)) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik} j_{sa}}^{DOST} = \sum_{\substack{l_{ik} = j_{sa}^{ik} + 1 \\ (n_{ik} = \mathbb{k}_1 + j_{sa}^{ik} + 1)}}^{(j_{sa} + \mathbb{k} - j_{sa}) l_{ik} + j_{sa}^{ik} + 1} \sum_{\substack{j_{sa} = j_{sa} + 1 \\ (n_{sa} = \mathbb{k}_2 - j_{sa} - 1)}}^{(n_{sa} = n - j_{sa} + 1)} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{sa} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} + \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_{sa}-l+1} \sum_{j_{sa}=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2}^{n_{sa}-l+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}$$

$$\begin{aligned}
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa} - 1)!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa}^{ik})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - l_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - 1)!}{(D + j^{sa} - n - j_{sa} - 1)! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=0}^{\binom{D}{k}} \sum_{l_{ik}=j_{sa}^{ik}+k}^{\binom{D}{k}} \sum_{j_{sa}^{ik}=j_{sa}^{ik}+1}^{\binom{D}{k}} \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}-\mathbb{k}_1}^{\binom{D}{k}} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\binom{D}{k}} \\
 & \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^{ik} - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{sa}^{ik} - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!} \cdot \\
 & \frac{1}{(n - s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

$$D \geq n < n \wedge l \neq i \wedge l_{sa} \leq D + j_{sa} - n \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$



$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z S_{j_{ik} j_{sa}}^{DOST} = \left( \sum_{k=l} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik})} \sum_{(j_{sa}=j_{sa}^{ik}+1)} \frac{l_{ik}+j_{sa}-j_{sa}^{ik}+1}{(j_{ik}-2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_i - j_{ik} - k_1 + 1) \cdot (n_{ik} + j_{ik} - j_{sa} - k_2)}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \right) +$$

$$\left( \sum_{k=l} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{(j_{sa}=j_{sa}^{ik}+2)} \frac{(j_{sa}+j_{sa}^{ik}-j_{sa}-1) l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}{(j_{ik}-2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_i - j_{ik} - k_1 + 1) \cdot (n_{ik} + j_{ik} - j_{sa} - k_2)}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \right)$$



$$\begin{aligned}
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(l_{ik}-l+1)} \sum_{(j_{ik}+j_{sa}-l-j_{sa}^{ik})}^{(l_{ik}-l+1)} \cdot \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}+j_{ik}+1)}^{(n_i-n+\mathbb{k}+1)} \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_i-n+\mathbb{k}+1)} \cdot \\
 & \frac{(n_i - \mathbb{k}_2 - 1)!}{(j_{ik} - \mathbb{k}_2 - 1)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) - \\
 & \sum_{k=l}^{( )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{( )} \sum_{j^{sa}=j_{sa}+1}^{l_s+j_{sa}-l} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}
 \end{aligned}$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}^{(\cdot)}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}$$

$$\frac{\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - \mathbb{k}_1 - 1)!}}{(D - 1)!} \cdot \frac{(n - l)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n_{ik} + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_{sa} \leq D + j_{sa} - n \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - j_{sa}^{ik} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - j_{sa}^{ik} \wedge j_{sa}^s = j_{sa}^{ik} - j_{sa}$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\}$$

$$s \geq 5 \wedge s = \dots + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \dots + \mathbb{k}_2 = \dots$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \left( \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\begin{aligned}
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \left( \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_{ik}-l+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1)}^{l_{ik}-l+1} \right) \cdot \\
 & \sum_{n_i=n+l_{ik}}^n \sum_{(n_i-j_{ik}-l_{k_2}+1)}^{(n_i-j_{ik}-l_{k_2}+1)} \sum_{(n_{sa}=n-j^{sa}+1)}^{n_{ik}+j_{ik}-l_{k_2}} \\
 & \frac{(n_i - j_{ik} - l_{k_2} + 1)!}{(j_{ik} - l_{k_2})! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - j_{sa} - l_{k_2} + 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(l_s + j_{sa}^{ik} - l)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \\
 & \sum_{n_i=n+l_{ik}}^n \sum_{(n_{is}=n+l_{ik}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}-l_{k_1}} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{( )}
 \end{aligned}$$

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$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!} \cdot \frac{1}{(n-s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - l)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_i \wedge$$

$$l_{sa} \leq D + j_{sa} - n \wedge l_i \leq D + s - n) \vee$$

$$D \geq n < n \wedge l = i > 0 \wedge$$

$$j_{sa} \leq j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^{ik}, \dots, j_{sa}^s\} \wedge$$

$$s \geq j_{sa}^{ik} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_2: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{j_{sa}^{ik}-l+1} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{l_{sa}-l+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa} - 1)!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa}^{ik})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - l_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - 1)!}{(D + j^{sa} - n - l_{sa} - 1)! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=0}^{j_{sa}^{ik}-l} \sum_{j_{ik}=j_{sa}^{ik}+k}^n \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{(n_i-j_s+1)} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)} \frac{(2 \cdot n_{ik} + j_{ik} + j_{sa}^{ik} - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!} \cdot \frac{1}{(n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$fz_{j_{ik}, j_{sa}}^{DOST} = \left( \sum_{k=l}^{\binom{l_{ik} + j_{sa} - l - j_{sa}^{ik}}{j_{sa} - j_{sa}^{ik} + 1}} \sum_{j_{sa} = l_{sa} + n - D}^{\binom{l_{ik} + j_{sa} - l - j_{sa}^{ik}}{j_{sa} - j_{sa}^{ik} + 1}} \sum_{n_i = n + k}^{\binom{n_i - j_{ik} - l + 1}{n_{ik} + j_{ik} - j_{sa} - k_2}} \sum_{n_{sa} = n - j_{sa} + 1}^{\binom{n_i - j_{ik} - l + 1}{n_{ik} + j_{ik} - j_{sa} - k_2}} \frac{(n_i - n_{ik} - 1)!}{(j_{sa} - j_{sa}^{ik} - 1)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{sa}^{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \right) + \left( \sum_{k=l}^{\binom{j_{sa} + j_{sa}^{ik} - j_{sa} - 1}{j_{sa} - j_{sa}^{ik} + 1}} \sum_{j_{sa} = l_{sa} + n - D}^{\binom{j_{sa} + j_{sa}^{ik} - j_{sa} - 1}{j_{sa} - j_{sa}^{ik} + 1}} \sum_{n_i = n + k}^{\binom{n_i - j_{ik} - k_1 + 1}{n_{ik} + j_{ik} - j_{sa} - k_2}} \sum_{n_{sa} = n - j_{sa} + 1}^{\binom{n_i - j_{ik} - k_1 + 1}{n_{ik} + j_{ik} - j_{sa} - k_2}} \right)$$

$$\begin{aligned}
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{(l_{ik} - l)} \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{sa}} j^{j_{ik}+j_{sa}-l-j_{sa}^{ik}+2} \\
 & \sum_{n_i=n+\mathbb{k}_1}^n \sum_{n_{sa}=n-j^{sa}+1}^{(n_i-j_{ik}-\mathbb{k}_1+1) \cdot n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) - \\
 & \sum_{k=l} \sum_{\binom{()}{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}} \sum_{l_s+j_{sa}-l}^{j^{sa}=l_i+n+j_{sa}-D-s}
 \end{aligned}$$

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$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}$$

$$\frac{1}{(n-s)!}$$

$$\frac{(l_s - 1)!}{(l_s + j_{ik} - l)! (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D - l_i + s - 1)! (l_i - j_{sa}^{ik} - 1)! (n + j_{sa} - j^{sa} - s)!}$$

- $D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1$
- $2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1$
- $j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa}^{ik} - 1 \wedge$
- $j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n - j_{sa} - s \wedge$
- $l_{ik} - j_{sa}^{ik} + 1 > l_{sa} + j_{sa}^{ik} - j_{sa}^{ik} - l_{ik} \wedge$
- $D + j_{sa} - n - l_{sa} \leq D - l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$
- $D \geq n < n \wedge l = i \Rightarrow s > 0 \wedge$
- $j_{sa} \leq j_{sa} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$
- $s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^{ik}, \dots, j_{sa}^i\} \wedge$
- $s > n - 1 = s + \mathbb{k} \wedge$
- $\mathbb{k}_z: z = 2 \wedge \mathbb{k}_z = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_z^{S_{j_{ik}, j_{sa}^{sa}}} = \left( \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \right)$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\begin{aligned}
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa})!}{(D + j^{sa} - n - l_{sa})! \cdot (D + j_{sa} - j^{sa})!} + \\
 & \left( \sum_{l=1}^{(l_{ik} + n + j_{sa}^{ik} - D - j_{sa})} \sum_{j_{sa}^{ik} = j_{sa}^{ik} + 1}^{l_{sa} - l + 1} \sum_{n=D}^{n-D} \right) \\
 & \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_2)} \sum_{(n_{sa} = n - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{k=l}^{(l_{ik} - l + 1)} \sum_{(j_{ik} = l_{sa} + n + j_{sa}^{ik} - D - j_{sa})}^{l_{sa} - l + 1} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik} + 1}
 \end{aligned}$$

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$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_{ik}-l_{k_1}+1) \\ (n_{ik}=n+l_{k_2}-j_{ik}+1)}} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - j_{sa})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} - l_{sa} - j_{sa})!}{(j_{ik} + j_{sa} - j_{sa} - l_{ik})! \cdot (j^{sa} - j_{sa}^{ik} - j_{sa})!} \cdot \\
 & \left( \frac{(D - j_{sa} - l_{sa} - s)!}{(n + j^{sa} - n - l_{sa})! \cdot (n + j^{sa} - j^{sa} - s)!} \right) \cdot \\
 & \sum_{k=l}^{(l_s+j_{sa}-l)} \sum_{\substack{(j_{ik}-l_i+n+j_{sa}^{ik}-D-s) \\ j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{(\quad)} \\
 & \frac{(2 \cdot j_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!}{(2 \cdot j_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!} \cdot \\
 & \frac{1}{(n - s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1 \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned} f_{z^D}^{j_{ik}, j_{sa}^{ik}} &= \sum_{j_{ik}=l_{ik}+n-D}^{(l_{ik}-1)} \sum_{j_{sa}^{ik}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{(l_{ik}-1)} \\ &= \sum_{j_{ik}=n+\mathbb{k}_1-1}^n \sum_{j_{sa}^{ik}=n-j_{sa}^{ik}+1}^{(n-j_{ik}+1)} \sum_{n_{sa}=n-j_{sa}^{ik}+1}^{(n_{ik}+j_{ik}-j_{sa}^{ik}-\mathbb{k}_2)} \\ &= \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(n_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \end{aligned}$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{j_{ik}=l_{ik}+n-D}^{(l_s + j_{sa}^{ik} - l)} \sum_{j_{sa}^{ik}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{(l_s + j_{sa}^{ik} - l)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik}}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{\binom{(\cdot)}{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}$$

$$\frac{(n - l)! \cdot (l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - \mathbb{k}_1 - 1)!} \cdot \frac{(D - l)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (j_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} + j_{sa} - s = l_i \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{sa} - j_{sa} - n + 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{ik} < j_{sa} - 1 \wedge j_{sa}^{ik} = j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^{i-1}, j_{sa}^{ik}, \dots, \mathbb{k}_2, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l} \sum_{\binom{(\cdot)}{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_i+j_{sa}-l-s+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \sum_{k=l}^{\binom{\cdot}{\cdot}} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{l_s+i-l} j_{sa}^{s-l_{ik}+n+j_{sa}-D-j_{sa}^{ik}} \sum_{(n_i)}^{n_i=n+k} \sum_{(n_i=n+k+j_{sa}^{ik}-j_{ik})}^{n_i=n+k} \sum_{(n_{ik}=n_{is}+j_{sa}^{ik}-k_1)}^{n_{ik}=n_{is}+j_{sa}^{ik}-k_1} \sum_{(n_{ik}+j_{ik}-j^{sa}-k_2)}^{n_{ik}+j_{ik}-j^{sa}-k_2} \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - j^{sa} - s - k - 2 \cdot k_1 - 2 \cdot k_2)!}{(2 \cdot n_{is} + 2 \cdot j_{sa}^s - n_{sa} - j^{sa} - n - j_{sa}^{ik} - 2 \cdot k_1 - 2 \cdot k_2)!} \cdot \frac{1}{(n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$D \geq n < n \wedge l \neq i \wedge l \leq D - n + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j_{sa}^{ik} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} - j_{sa}^{ik} \leq j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + j_{sa}^{ik} > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$

$D \geq n < n \wedge l = k > 0 \wedge$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j^{sa}}^{DOST} = \sum_{k=l}^{(l_i + j_{sa}^{ik} - l - s + 1)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{ik}^{ik}}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa}}$$

$$\frac{(n_i - 1)!}{(j_{ik} - 2)! (n_i - n_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! (n_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_{ik} + n - D)} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - \mathbb{k}_1} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\quad)}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!} \cdot \frac{1}{(n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$\sum_{i_{ik}, j_{sa}}^{DOS} \sum_{(i_{ik}, \dots, n-D)}^{(j^{sa} + j_{sa}^{ik} - j_{sa})} \sum_{j_{sa}^{ik} + 1}^{l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1} \sum_{j_{sa} = l_i + n + j_{sa} - D - s} \sum_{n}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{ik} + j_{ik} - j^{sa} - k_2} \sum_{n_{sa} = n - j^{sa} + 1}^{(n_i - n_{ik} - 1)!} \cdot \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$



$$\begin{aligned}
 & \sum_{k=l} \sum_{(l_{ik}=l+1)}^{(l_{ik}-l+1)} \sum_{(j_{sa}=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2)}^{l_i+j_{sa}-l-s+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{(n_{sa}=n-j_{sa}^{ik}+1)}^{n_{ik}+j_{ik}-j_{sa}^{ik}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} + j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j_{sa}^{ik} - l_{k_2})!} \cdot \\
 & \frac{(n_i - 1)!}{(n_i + j_{sa} - n_{sa} - 1)! \cdot (n - j_{sa}^{ik})!} \cdot \\
 & \frac{(l_{ik} - j_{sa}^{ik})!}{(n_i - j_{ik} - l_{k_1} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa}^{ik})!}{(j_{ik} + j_{sa}^{ik} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa}^{ik} - l_{sa} - s)!}{(D + j_{sa}^{ik} - l_{sa} - s)! \cdot (n + j_{sa} - j_{sa}^{ik} - s)!} \cdot \\
 & \sum_{k=l} \sum_{(j_{ik}=j_{sa}^{ik}+j_{sa}^{ik}-j_{sa})}^{( )} \sum_{(j_{sa}^{ik}=l_{sa}+n-D)}^{l_s+j_{sa}-l} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-l_{k_2})}^{( )} \\
 & \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j_{sa}^{ik} - s - j_{sa}^{ik} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j_{sa}^{ik} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!} \cdot \\
 & \frac{1}{(n - s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
 \end{aligned}$$

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$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$\begin{aligned} & \sum_{k=1}^{(l_i+n+j_{sa}^{ik}-s-1)} \sum_{l_i+l_s+l_{sa}=l}^{(l_i+n+j_{sa}^{ik}-s-1)} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_i+j_{sa}-l-s+1} \\ & \sum_{i=n+k}^n \sum_{(n_i=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-k_2} \\ & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\ & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\ & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\ & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\ & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\ & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \end{aligned}$$

$$\begin{aligned}
 & \sum_{k=l} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(l_{ik}-l+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{l_i+j_{sa}-l-s+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}^{ik}}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} + j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_i + j_{sa} - n - 1)! \cdot (n - j^{sa} - 1)!}{(n_i - j_{ik} - l_{k_1} + 1)! \cdot (j_{ik} - j_{sa} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{ik} - l_{ik} - j_{sa})!}{(j_{ik} + j_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - l_{sa} - s)! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})}^{(l_s+j_{sa}^{ik}-l)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{()} \\
 & \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!} \cdot \\
 & \frac{1}{(n - s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
 \end{aligned}$$

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$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\left( (D \geq n < n \wedge l \neq i, l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l \neq i, l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge l_i \leq D + s - n))$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + 1$$

$$\mathbb{k}_2 - z = 2 \wedge \mathbb{k}_2 = \mathbb{k}_1 + 1 \Rightarrow$$

$$fz S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(\quad)} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{l_{sa}-l+1} \sum_{j^{sa}=j_{sa}+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(\ )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\ )} \sum_{j_{sa}=j_{sa}+1}^{l_s+j_{sa}-l}$$

$$\sum_{n_i=n+l}^n \binom{n_i+l-1}{n_i+l-k-j_{ik}}$$

$$\sum_{n_{ik}=n_i+j_{sa}-l-k_1-k_2}^{(\ )} \sum_{j_{sa}=j_{sa}-k_2}^{(\ )}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j_{sa}^s - s - j_{sa}^s - 2 \cdot k_1 - 2 \cdot k_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j_{sa}^s - s - 2 \cdot j_{sa}^s - 2 \cdot k_1 - 2 \cdot k_2)!} \cdot \frac{1}{(n-s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j_{sa}^s - s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_i \leq l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} - j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_{sa} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = j_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n - l_i \leq D + l_{sa} + s - n - j_{sa} \wedge$$

$$D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$\begin{aligned}
 f_{zS}^{DOST} j_{ik} j_{sa}^{sa} &= \sum_{k=l}^{( )} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})}^{( )} \sum_{j_{sa}^{sa}=j_{sa}+1}^{l_{sa}-l+1} \\
 &\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-l_{k_2}} \\
 &\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} + j_{ik} + 1)!} \cdot \\
 &\frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j_{sa} - l_{k_2})!} \cdot \\
 &\frac{(n_i + j_{sa} - n - 1)! \cdot (n - j_{sa} - 1)!}{(n_i - j_{ik} - l_{k_1} + 1)! \cdot (j_{ik} - j_{sa} - 1)!} \cdot \\
 &\frac{(D - j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa} - s)! \cdot (n + j_{sa} - j_{sa} - s)!} \cdot \\
 &\sum_{k=l}^{( )} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})}^{( )} \sum_{j_{sa}^{sa}=l_i+n+j_{sa}-D-s}^{l_s+j_{sa}-l} \\
 &\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 &\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}}^{( )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-l_{k_2})}^{( )} \\
 &\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - s - j_{sa}^{ik} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!} \cdot \\
 &\frac{1}{(n - s)!} \cdot \\
 &\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 &\frac{(D - l_i)!}{(D + j_{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}
 \end{aligned}$$

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$$(D \geq n < n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\}$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z S_{j_{ik} j_{sa}}^{DOSI} = \sum_{k=l}^{(l_{sa} + j_{sa}^{ik} - l - j_{sa} + 1)} \sum_{(j_{ik} = l_{sa} + n + j_{sa}^{ik} - D - j_{sa})} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}} \\ \sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - k_2} \\ \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)} j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - k_2} \sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa}^{ik} - k_2)}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - j_{sa}^{ik} - 2 \cdot k_2 - 2 \cdot k_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - j_{sa}^{ik} - 2 \cdot k_2 - 2 \cdot k_2)!}$$

$$\frac{1}{(n - s)!}$$

$$\frac{(j_{sa} - l - 1)!}{(j_{sa} + j_{sa}^{ik} - j_{sa}^{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(j_{sa} - l_i)!}{(D + j^{sa} + j_{sa} - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

- $((D \geq n < n \wedge l_i \wedge l_s \leq D - n + 1 \wedge$
- $j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$
- $j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - s \wedge$
- $l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$
- $D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$
- $D - n - s < l_i \leq D + l_{sa} + s - n - j_{sa}) \vee$
- $(D \geq n < n \wedge l_i \neq l_s \wedge l_s \leq D - n + 1 \wedge$
- $j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$
- $j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - s \wedge$
- $l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$
- $D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$



$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(j_{sa} + j_{sa}^{ik} - j_{sa})} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{j_{sa} = l + n - D} \sum_{(j_{sa} = l + n - D)}^{j_{sa} = l + n - D}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - 1) + 1} \sum_{(n_{sa} = n - j_{sa} + 1)}^{n_{ik} + j_{ik} - \mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} +$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{sa} - l + 1} \sum_{j_{sa} = l_s + j_{sa} - l + 1}^{l_{sa} - l + 1}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{(n_{sa} = n - j_{sa} + 1)}^{n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa})!}{(D + j^{sa} - n - l_{sa})! \cdot (D + j_{sa} - j^{sa})!}$$

$$\sum_{j_{ik}=j_{sa}^{ik} - j_{sa}}^{(j_{sa} - l - j_{sa}^{ik} + 1)}$$

$$\sum_{i=n+\mathbb{k}}^{(n_i - j_s + 1)} \sum_{(n_{is} = n + \mathbb{k} + j_{sa}^{ik} - j_{ik})}$$

$$\sum_{k=n_{is} + j_{sa}^s - j_{sa}^{ik} - \mathbb{k}_1}^{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}$$

$$\frac{1}{(n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$(D > n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D + s - n < l_i \leq D + l_{sa} + s - n - j_{sa} \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_{z^s}^{ST} = \sum_{k=l}^{(l_{sa}+n+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_{sa}-l+1} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-l+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-k_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

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$$\begin{aligned}
 & \sum_{k=l} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})}^{(l_s+j_{sa}^{ik}-l)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{l_{sa}-l+1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j_{sa}}^{n_{ik}+j_{ik}-j_{sa}-k_2} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} + j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!} \cdot \\
 & \frac{(n_i - 1)!}{(n_i + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - j_{ik})!}{(l_{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - 1)!}{(j_{ik} + j_{sa} - j_{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(l_{ik}-l+1)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-k_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \\
 & \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot k_1 - 2 \cdot k_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot k_1 - 2 \cdot k_2)!} \cdot \\
 & \frac{1}{(n - s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
 \end{aligned}$$

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$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\left( (D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge \right.$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D + s - n < l_i \leq D + l_{sa} + s - n - j_{sa})$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$D - n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
 f_z S_{j_{ik}, j^{sa}}^{DOST} &= \sum_{k=l} \sum_{(j_{ik}=l_{ik}+n-D)}^{(j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{j^{sa}=l_{sa}+n-D}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \\
 &\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
 &\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \\
 &\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \\
 &\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \\
 &\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \\
 &\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - n_{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \\
 &\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 &\sum_{k=l} \sum_{(j_{ik}=l_{ik}+n-D)}^{(l_{ik}-l+1)} \sum_{j^{sa}=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2}^{l_{sa}-l+1} \\
 &\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
 &\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \\
 &\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \\
 &\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \\
 &\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}
 \end{aligned}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{( )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{( )} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_s+j_{sa}-l}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_i+l_k-j_{ik})}^{(n_i+l_k+1)}$$

$$\sum_{n_{ik}=n_i+j_{sa}-l_k}^{( )} \sum_{(n_{ik}-j^{sa}-l_k)}^{( )}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa} - n_{sa} - j^{sa} - s - j_{sa} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - 2 \cdot j_{sa} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!}$$

$$\frac{1}{(n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j_{sa} - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$(D \geq n < n \wedge l \neq l_i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n \leq l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq l_i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D + s - n < l_i \leq D + l_{sa} + s - n - j_{sa}) \vee$$

$$(D \geq n < n \wedge l \neq l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_i + j_{sa} - l_{sa}$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j^l - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, j_{sa}^s\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$D_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{sa}+n+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{(j_{ik}=l_{ik}+n-D)} \sum_{j_{sa}=l_{sa}+n-D}^{l_{sa}-l+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_i-j_{ik}-k_1+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-k_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$



$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-s)}^{(l_{ik}-l+1)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l+1)}$$

$$\sum_{n_i=n+l_{ik}}^n \sum_{(n_i-j_{ik}+1)}^{(n_i-j_{ik}+1)} \sum_{(n_{ik}+j_{ik}-l_{k_2})}^{(n_{ik}+j_{ik}-l_{k_2})} \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{sa}=n-j^{sa}+1)}$$

$$\frac{(n_i - n_{ik} - j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - l_{k_2})!}$$

$$\frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_s+j_{sa}^{ik}-l)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(l_s+j_{sa}^{ik}-l)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_s+j_{sa}^{ik}-l)}$$

$$\sum_{n_i=n+l_{ik}}^n \sum_{(n_{is}=n+l_{ik}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{( )}$$



$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!} \cdot \frac{1}{(n-s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - l)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\left( (D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge \right.$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1) \wedge$$

$$D + s - n < l_i \leq D + l_{sa} - n - j_{sa}) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa}^{ik} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l} \sum_{\binom{()}{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}} \sum_{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{j_{sa}=l_{ik}+n+j_{sa}-D-j_{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{\binom{(n_i-j_{ik}-\mathbb{k}_1+1)}{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}} \sum_{n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}+1} \frac{(n_i-1)!}{(j_{ik}-2)! \cdot (n_i-n_{ik}+1)!} \cdot \frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j_{sa}-j_{ik}-1)! \cdot (n_{ik}-n_{sa}-j_{sa}^{ik}-\mathbb{k}_2)!} \cdot \frac{(n_{sa}+j_{sa}^{ik}-n-1)! \cdot (n-j_{sa}^{ik})!}{(n_{sa}+j_{sa}^{ik}-n-1)! \cdot (n-j_{sa}^{ik})!} \cdot \frac{(l_{ik}-l-j_{sa}^{ik})!}{(l_{ik}-j_{ik}-l+1)! \cdot (j_{ik}-j_{sa}^{ik}-1)!} \cdot \frac{(D+j_{sa}-l_{sa}-s)!}{(D+j_{sa}-n-l_{sa})! \cdot (n+j_{sa}-j_{sa}^{ik}-s)!} \cdot \sum_{k=l} \sum_{\binom{()}{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}} \sum_{l_s+j_{sa}-l} \sum_{j_{sa}=l_i+n+j_{sa}-D-s}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{\binom{(n_i-j_s+1)}{n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik}}} \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{\binom{()}{n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-\mathbb{k}_2}} \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j_{sa}^{ik} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j_{sa}^{ik} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!} \cdot \frac{1}{(n-s)!} \cdot \frac{(l_s-l-1)!}{(l_s+j_{sa}^{ik}-j_{ik}-l)! \cdot (j_{ik}-j_{sa}^{ik}-1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l = l \wedge l_{sa} \leq D + j_{sa} - n \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$fz S_{j_{ik}, j_{sa}}^{DOS} = \left( \sum_{k=l}^{(\cdot)} \sum_{l(j_{ik}=j_{sa}^{ik})}^{(\cdot)} \sum_{j^{sa}=j_{sa}} \right)$$

$$\sum_{n_i=n+k}^{(n_i-j_{ik}-k_1+1)} \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{n_{ik}+j_{ik}-j^{sa}-k_2} \sum_{n_{sa}=n-j^{sa}+1}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!} \Bigg) +$$

$$\left( \sum_{k=l}^{(\cdot)} \sum_{l(j_{ik}=j_{sa}^{ik})}^{(\cdot)} \sum_{j^{sa}=j_{sa}+1}^{l_{sa}-l+1} \right)$$

$$\sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-k_2}$$



$$\begin{aligned}
 f_z S_{j_{ik}, j_{sa}}^{DOST} &= \sum_{k=i}^l \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})}^{(l_{sa}-i)^{l+1}} \sum_{j_{sa}=j_{sa}} \\
 &\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_k-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}}^{n_{ik}+j_{ik}-j_{sa}-l_{k_2}} \\
 &\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} + j_{ik} + 1)!} \cdot \\
 &\frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - l_{k_2})!} \cdot \\
 &\frac{(n_i - 1)!}{(n_i + j_{sa} - n_{sa} - 1)! \cdot (n - j_{sa})!} \cdot \\
 &\frac{(l_{ik} - j_{ik} - i^{ik} - 1)! \cdot (j_{ik} - j_{sa}^k - 1)!}{(D + j_{sa} - l_{sa} - 1)!} \cdot \\
 &\frac{(D + j_{sa} - n - l_{sa} - 1)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \cdot \\
 &\sum_{k=i}^l \sum_{(j_{ik}=j_{sa}^{ik})}^{(l_{sa}-i)^{l+1}} \sum_{j_{sa}=j_{sa}} \\
 &\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n_i-j_{ik}-l_{k_1}+1)}^{(l_{sa}-i)^{l+1}} \sum_{n_{sa}=n_{ik}+j_{ik}-j_{sa}-l_{k_2}} \\
 &\frac{(2 \cdot n_i + n_{sa} - n_{sa} - j_{ik} - j_{sa} - s - 2 \cdot l_{k_1} - 2 \cdot l_{k_2} + j_{sa}^s)!}{(2 \cdot n_i + n_{sa} - j_{sa} - n - 2 \cdot l_{k_1} - 2 \cdot l_{k_2} + j_{sa}^s)! \cdot (n - s)!} \cdot \\
 &\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}
 \end{aligned}$$

$$D > n < n \wedge l = i^l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} + j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D \geq n < n \wedge l = l_k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z S_{j_{ik} j_{sa}}^{DOST} = \sum_{k=0}^n \sum_{i^l (j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})}^{( )} \sum_{j_{sa}=j_{sa}}^{l_{sa}-i^l+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n_{ik}+j_{ik}-j_{sa}-k_2}^{n_{ik}+j_{ik}-j_{sa}-k_2}$$

$$\frac{(n_{ik}-n_{ik}-1)!}{(j_{sa}-2)! \cdot (n_{ik}-n_{ik}-j_{ik}+1)!}$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j_{sa}-j_{ik}-1)! \cdot (n_{ik}-j_{ik}-n_{sa}-k_2)!}$$

$$\frac{(n_{ik}-1)!}{(n_{sa}-n_{sa}-n-1)! \cdot (n-j_{sa})!}$$

$$\frac{(l_i - i^l - j_{sa}^{ik})!}{(l_{ik} - i^l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!}$$

$$\sum_{k=0}^n \sum_{i^l (j_{ik}=j_{sa})}^{( )} \sum_{j_{sa}=j_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{ik}=n_i-j_{ik}-k_1+1)}^{( )} \sum_{n_{sa}=n_{ik}+j_{ik}-j_{sa}-k_2}$$

$$\frac{(2 \cdot n_i + j_{sa}^{ik} - n_{sa} - j_{ik} - j_{sa} - s - 2 \cdot k_1 - 2 \cdot k_2 + j_{sa}^s)!}{(2 \cdot n_i - n_{sa} - j_{sa} - n - 2 \cdot k_1 - 2 \cdot k_2 + j_{sa}^s)! \cdot (n - s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l = i^l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

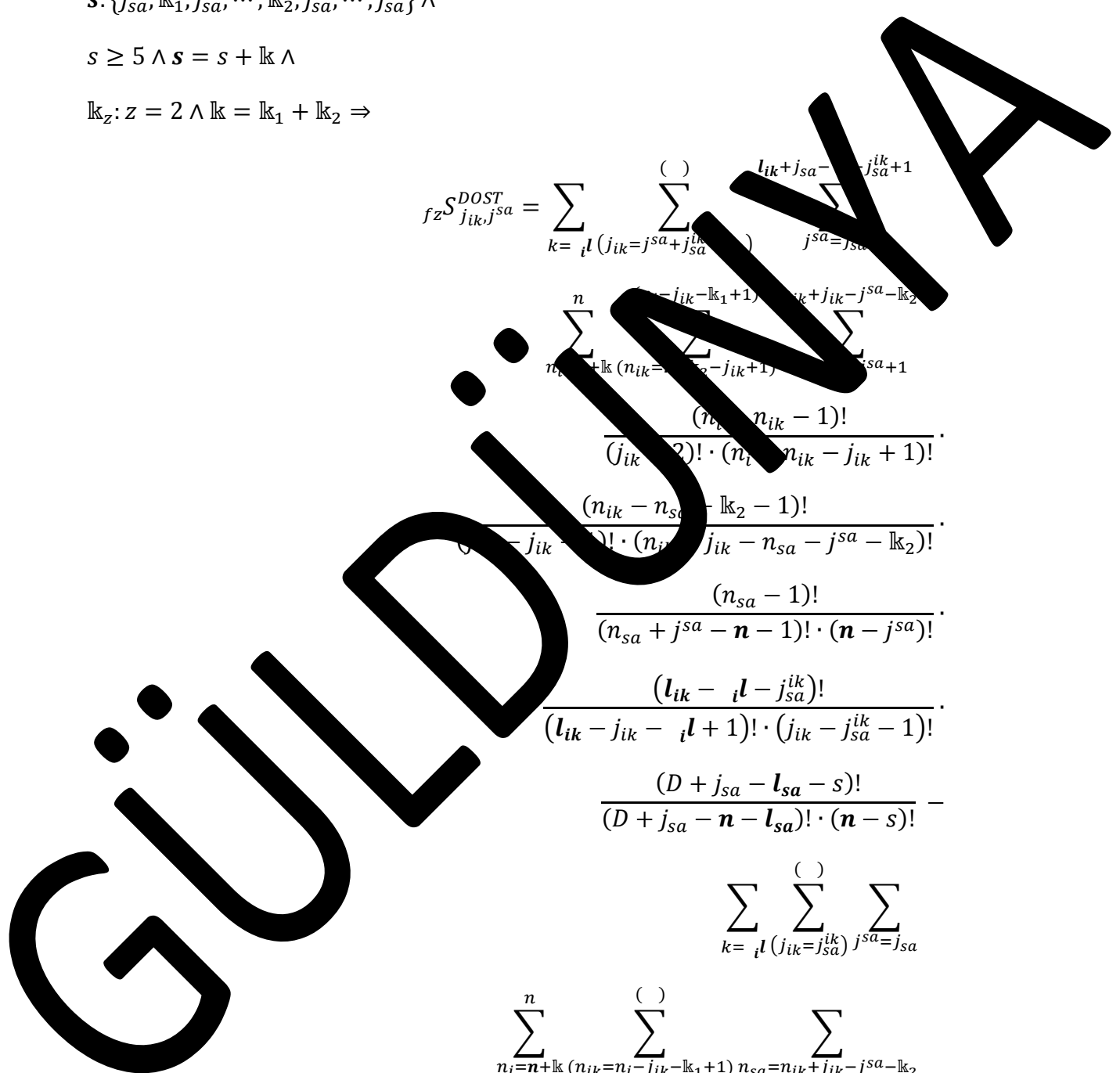
$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik} j_{sa}}^{DOST} = \sum_{k=i}^n \sum_{l(j_{ik}=j_{sa}+j_{sa}^{ik})}^{( )} \frac{\binom{l_{ik}+j_{sa}-j_{sa}^{ik}+1}{j_{sa}=j_{sa}^{ik}}}{} \cdot \frac{\binom{n-j_{ik}-\mathbb{k}_1+1}{n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1} \cdot \binom{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}{n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}}{} \cdot \frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j_{ik}-2)! \cdot (n_{ik}-n_{sa}-j_{ik}+1)!} \cdot \frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(n_{ik}-j_{ik}-1)! \cdot (n_{ik}-n_{sa}-j_{sa}-\mathbb{k}_2)!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j_{sa}-n-1)! \cdot (n-j_{sa})!} \cdot \frac{(l_{ik}-i-l-j_{sa}^{ik})!}{(l_{ik}-j_{ik}-i-l+1)! \cdot (j_{ik}-j_{sa}^{ik}-1)!} \cdot \frac{(D+j_{sa}-l_{sa}-s)!}{(D+j_{sa}-n-l_{sa})! \cdot (n-s)!} \cdot \sum_{k=i}^n \sum_{l(j_{ik}=j_{sa}^{ik})}^{( )} \sum_{j_{sa}=j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1}^{( )} \sum_{n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}^{( )}$$

$$\frac{(2 \cdot n_i + j_{sa}^{ik} - n_{sa} - j_{ik} - j_{sa} - s - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2 + j_{sa}^s)!}{(2 \cdot n_i - n_{sa} - j_{sa} - n - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2 + j_{sa}^s)! \cdot (n-s)!} \cdot \frac{(D-l_i)!}{(D+s-n-l_i)! \cdot (n-s)!}$$





$$D \geq n < n \wedge l = {}_i l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z^{S_{POST} j_{sa}} = \sum_{k=i^l}^{(l_{sa}+j_{sa}^{ik}-i^l)} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(n_i-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+\mathbb{k}_2}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - i^l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i^l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!}$$

$$\sum_{k=i^l}^{()} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j_{sa}=j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{()} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(2 \cdot n_i + j_{sa}^{ik} - n_{sa} - j_{ik} - j^{sa} - s - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2 + j_{sa}^s)!}{(2 \cdot n_i - n_{sa} - j^{sa} - n - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2 + j_{sa}^s)! \cdot (n - s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l = {}_i l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\sum_{k=i}^{\binom{D-l+1}{i}} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - {}_i l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - {}_i l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!}$$

$$\sum_{k=i}^n \sum_{j_{ik}=j_{sa}^{ik}}^{( )} \sum_{j^{sa}=j_{sa}}^{( )}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{( )} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}}^{( )}$$

$$\frac{(2 \cdot n_i + j_{sa}^{ik} - n_{sa} - j_{ik} - j^{sa} - s - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2 + j_{sa}^{ik})!}{(2 \cdot n_i - n_{sa} - j^{sa} - n - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2 + j_{sa}^{ik})! (n-s)!}$$

$$\frac{(D - l_i)!}{(D + s - l_i - 1)! (n-s)!}$$

$$D \geq n < n \wedge l = i! \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge l_i \leq D + s - n \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\}$$

$$s \geq 5 \bullet s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=i}^n \sum_{(j_{ik}=j_{sa}^{ik})}^{(l_{sa}+j_{sa}^{ik}-i!-j_{sa}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - i^l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i^l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!}$$

$$\sum_{k_1} \sum_{\substack{(\cdot) \\ (j_{ik} = j_{sa}^{ik}) \\ j_{sa} = j_{sa}}} \sum_{j_{sa}}$$

$$\sum_{n_i = n + k}^n \sum_{\substack{(\cdot) \\ (n_{ik} = \dots, k_1 + 1) \\ n_{sa} = \dots + j_{ik} - j_{sa} - k_2}}$$

$$\frac{(2 \cdot n_i + j_{sa}^{ik} - n_{sa} - j_{sa} - j_{sa} - 2 \cdot k_1 - 2 \cdot k_2 + j_{sa}^s)!}{(2 \cdot n_i - n_{sa} - j_{sa} - n - 2 \cdot k_1 - 2 \cdot k_2 + j_{sa}^s)! \cdot (n - s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$((D \geq n < n \wedge l = i^l \wedge l_s = n - n) \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa} + j_{sa}^{ik} > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_s \wedge$$

$$l_i \leq D + s - n)$$

$$(D \geq n < n \wedge l = i^l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + j_{sa}^{ik} > l_s \wedge$$

$$(l_{sa} - j_{sa} + j_{sa}^{ik} - n \wedge l_i \leq D + s - n)) \wedge$$

$$D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik} j^{sa}}^{DOST} = \sum_{k=i}^l \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j}^{(l_{ik}-i^{l+1}) l_{sa}-i^{l+1}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-1}^{n_{ik}+j_{ik}-j^{sa}-1}$$

$$\frac{(n_i-1)!}{(j_{ik}-2)! \cdot (n_i-n_{ik}-j_{ik}+1)!} \cdot \frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-n-1)! \cdot (n-j^{sa})!} \cdot \frac{(n_{ik}-i^l-j_{sa}^{ik})!}{(n_{ik}-j_{ik}-1)! \cdot (j_{ik}-j_{sa}^{ik}-1)!}$$

$$\frac{(l_{sa}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}$$

$$\frac{(D+j_{sa}-l_{sa}-s)!}{(D+j_{sa}-n-l_{sa})! \cdot (n+j_{sa}-j^{sa}-s)!} \cdot \sum_{k=i}^l \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{( )} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}^{( )}$$

$$\frac{(2 \cdot n_i + j_{sa}^{ik} - n_{sa} - j_{ik} - j^{sa} - s - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2 + j_{sa}^s)!}{(2 \cdot n_i - n_{sa} - j^{sa} - n - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2 + j_{sa}^s)! \cdot (n-s)!}$$

$$\frac{(D-l_i)!}{(D+s-n-l_i)! \cdot (n-s)!}$$

$$D \geq n < n \wedge l = i^l \wedge l_{sa} \leq D + j_{sa} - n \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \left( \sum_{k=i}^l \left( \sum_{(j_{ik} = j_{sa}^{ik} - j_{sa})}^{(l_{ik} + j_{sa} - i)} \sum_{j_{sa} = j_{sa}}^{l_{ik} + j_{sa} - i} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{sa} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - i - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!} \right) + \left( \sum_{k=i}^l \sum_{(j_{ik} = j_{sa}^{ik})}^{(j_{sa} + j_{sa}^{ik} - j_{sa} - 1)} \sum_{j_{sa} = j_{sa} + 1}^{l_{ik} + j_{sa} - i - j_{sa}^{ik} + 1} \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \right) \right)$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - i^l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i^l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{i^{l+1} - i^l + 1} \sum_{j_{sa}=l_{ik} + j_{sa}^{ik} + 2}^{i^{l+1} - i^l + 1} \dots$$

$$\sum_{n_{ik}=n - j_{ik} - \mathbb{k}_1}^n \sum_{j_{ik}=n_{ik} - j_{ik} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \sum_{n_{sa}=n - j^{sa} + 1}^{n_{sa} = n - j^{sa} + 1} \dots$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - i^l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i^l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \Bigg) -$$

$$\sum_{k=i^l}^{( )} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{sa}}$$

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$$\sum_{n_i=n+\mathbb{k}}^n \sum_{\binom{()}{n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1}} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \frac{(2 \cdot n_i + j_{sa}^{ik} - n_{sa} - j_{ik} - j^{sa} - s - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2 + j_{sa}^s)!}{(2 \cdot n_i - n_{sa} - j^{sa} - n - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2 + j_{sa}^s)! \cdot (n-s)!} \frac{(D-l_i)!}{(D+s-n-l_i)! \cdot (n-l_i)!}$$

$$D \geq n < n \wedge l = {}_i l \wedge l_{sa} \leq D + j_{sa} - n \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2$$

$$\begin{aligned} \sum_{n_i=n+\mathbb{k}}^n \sum_{\binom{()}{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}} \sum_{n_{sa}=n-j^{sa}+1} &= \left( \sum_{k={}_i l}^{(l_{ik}-{}_i l+1)} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \right) \\ &\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \\ &\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \\ &\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \\ &\frac{(l_{ik} - {}_i l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - {}_i l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \end{aligned}$$



$$\begin{aligned}
 & \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!} \right) + \\
 & \left( \sum_{k=i}^l \sum_{(j_{ik}=j_{sa}^{ik})}^{(l_{ik}-i^{l+1})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{l_{sa}-i^{l+1}} \right. \\
 & \sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-1}^{n_{ik}+j_{ik}-j^{sa}-1} \\
 & \frac{(n_i - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(n_{ik} - i^{l+1} - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i^{l+1} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(j_{ik} + i^{l+1} - j^{sa} - l_{ik} - j_{sa})!}{(j_{ik} + i^{l+1} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) - \\
 & \sum_{k=i}^l \sum_{(j_{ik}=j_{sa}^{ik})}^{( )} \sum_{j^{sa}=j_{sa}} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{ik}=n_i-j_{ik}-k_1+1)}^{( )} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2} \\
 & \frac{(2 \cdot n_i + j_{sa}^{ik} - n_{sa} - j_{ik} - j^{sa} - s - 2 \cdot k_1 - 2 \cdot k_2 + j_{sa}^s)!}{(2 \cdot n_i - n_{sa} - j^{sa} - n - 2 \cdot k_1 - 2 \cdot k_2 + j_{sa}^s)! \cdot (n - s)!} \\
 & \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}
 \end{aligned}$$

$$D \geq n < n \wedge l = i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z = \sum_{k=1}^n \sum_{j_{sa}^{ik}=j_{sa}}^{( )} \sum_{j_{sa}^{ik}=j_{sa}}^{( )}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{ik}=n-k_2-j_{ik}+1)}^{(n_i-j_{ik}+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-k_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(n_i - n_{ik} - j_{ik} + 1)! \cdot (n_i - n_{ik} - k_2 - 1)!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{sa}^{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!}$$

$$\sum_{k=1}^n \sum_{j_{sa}^{ik}=j_{sa}}^{( )} \sum_{j_{sa}^{ik}=j_{sa}}^{( )}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{ik}=n_i-j_{ik}-k_1+1)}^{( )} \sum_{n_{sa}=n_{ik}+j_{ik}-j_{sa}-k_2}^{( )}$$

$$\frac{(2 \cdot n_i + j_{sa}^{ik} - n_{sa} - j_{ik} - j_{sa} - s - 2 \cdot k_1 - 2 \cdot k_2 + j_{sa}^s)!}{(2 \cdot n_i - n_{sa} - j_{sa} - n - 2 \cdot k_1 - 2 \cdot k_2 + j_{sa}^s)! \cdot (n - s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$(D \geq n < n \wedge l = i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - n \wedge l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l = i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - l_{sa} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l = i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - l_{sa} \wedge$$

$$l_i \leq D + s - n) \wedge$$

$$D \geq n < n \wedge l = i \wedge l_s = 0 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: (k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^s)$$

$$\geq 5 \wedge l_s = s + k_1 \wedge$$

$$k_z: z = 2 \wedge k_1 = k_2 = 2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=i}^{\binom{D}{l}} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j_{sa}=j_{sa}^{ik}}^{l_{sa}-l+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-k_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=1}^{(\cdot)} \sum_{(j_{ik}=j_{sa}^{ik})} j^{sa}$$

$$\sum_{n_i=n+\mathbb{k}_1}^n \sum_{(n_i-j_{ik}-1) n_{sa}=n_{ik}+j_{ik}} j^{sa-\mathbb{k}_2}$$

$$\frac{(2 \cdot n_i + j_{sa}^{ik} - n_{sa} - j_{ik} - j^{sa} - s - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2 + j_{sa}^s)!}{(2 \cdot n_i - n_{sa} - j_{ik} - n - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2 + j_{sa}^s)! \cdot (n - s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} + j^{sa} + j_{sa} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq n + j_{sa} - s \wedge$$

$$(l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} + j^{sa} + j_{sa} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq n + j_{sa} - s \wedge$$

$$(l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik})) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z S_{j_{ik} j_{sa}}^{DOST} = \left( \sum_{k=l} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(l_{ik}+j_{sa}-l-j_{sa}^{ik}+1)} \sum_{(j_{sa}=l_{sa}+n-D)} \right. \\ \sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-k_2} \\ \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - k_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(j_{sa} - l - j_{sa}^{ik})!}{(n_{sa} + j_{sa} - n + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \\ \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \right) + \\ \left( \sum_{k=l} \sum_{(j_{ik}=l_{ik}+n-D)} \sum_{(j_{sa}+j_{sa}^{ik}-j_{sa}-1)} \sum_{(l_{ik}+j_{sa}-l-j_{sa}^{ik}+1)} \sum_{(j_{sa}=l_{sa}+n-D)} \right. \\ \sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-k_2} \\ \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \left. \right)$$

$$\begin{aligned}
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_{ik}+n-D)}^{l_{sa}+1} \sum_{(j_{sa}=j_{sa}^{ik}+2)}^{l_{sa}+1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_i-j_{ik}+1)}^{(n_i-j_{ik}+1)} \sum_{(n_{sa}=n-j^{sa}+1)}^{n_{ik}+j_{ik}-k_2} \\
 & \frac{(n_{ik}-j_{ik}-k_1+1)!}{(j_{ik}-k_1-2)! \cdot (n_{ik}-n_{ik}-j_{ik}-k_1+1)!} \cdot \\
 & \frac{(n_{ik}-n_{sa}-k_2-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}-j_{ik}-n_{sa}-j^{sa}-k_2)!} \cdot \\
 & \frac{(n_{sa}-1)!}{(j^{sa}-n-1)! \cdot (n-j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) \cdot \\
 & \sum_{k=l}^{( )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-k_1}^{( )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{( )}
 \end{aligned}$$

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$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!} \cdot \frac{1}{(n-s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - l)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 2 \leq l \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 2 \leq l \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik}) \wedge$$

$$D \geq n < n \wedge l_s > 0 \wedge$$

$$j_{sa} \leq j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa} < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i, \dots, j_{sa}^i\} \wedge$$

$$s \geq n - \mathbb{k} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l} \sum_{(j_{ik}=l_{ik}+n-D)}^{(l_{ik}-l+1)} \sum_{(j_{sa}=l_{sa}+n-D)}^{l_{sa}-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{(n_{sa}=n-j_{sa}+1)}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa} - 1)!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa}^{ik})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (n_{sa} + j_{sa}^{ik} - j_{ik} - l_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - 1)!}{(D + j^{sa} - n - l_{sa})! \cdot (n_{sa} + j_{sa}^{ik} - j^{sa} - s)!} \cdot \sum_{k=l}^{n} \sum_{(j_{ik}=j_{sa}^{ik}-j_{sa})}^{(j_{ik}+j_{sa}^{ik})} \sum_{(n_i=n+l)}^{(n_i+n+j_{sa}-D-s)} \sum_{n_i=n+l}^n \sum_{(n_{is}=n+l+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(j_{sa}^{ik}+1)} \cdot \frac{(2 \cdot n_{ik} + j_{ik} + n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!} \cdot \frac{1}{(n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

- $((D \geq n < n \wedge l_s > D - n + 1 \wedge$
- $2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$
- $j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$



$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik})) \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$\sum_{z=2}^{DOS} \sum_{j_{ik}, j_{sa}}^{(l_{ik}-l)} \sum_{l} (j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa}) j^{sa=j_{ik}+j_{sa}-j_{sa}^{ik}} \sum_{n_i=n+k}^n \sum_{n_{ik}=n+k_2-j_{ik}+1}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-k_2} \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \Bigg) + \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\begin{aligned}
& \left( \sum_{k=l}^{(l_{sa}+n+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{(j_{ik}=l_{ik}+n-D)}^{l_{sa}-l+1} \sum_{j^{sa}=l_{sa}+n-D} \right. \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
& \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - 1)!}{(j_{ik} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(D + j_{sa}^{ik} - l_{sa} - s)!}{(D + j_{sa}^{ik} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})}^{(l_{ik}-l+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{l_{sa}-l+1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
& \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}
\end{aligned}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \left( \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) -$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(n_{is}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n=n+l}^n \sum_{(n_{is}=n+l-k)}^{(n_{is}+1)} \sum_{(j_{ik})}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-k_1-k_2}^{(n_{ik})} \sum_{(j^{sa}-k_2)}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa} - n_{sa} - j^{sa} - s - j_{sa} - 2 \cdot k_1 - 2 \cdot k_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - 2 \cdot j_{sa} - 2 \cdot k_1 - 2 \cdot k_2)!}$$

$$\frac{1}{(n-s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} - s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s = D - n - 1 \wedge$$

$$2 \leq l_s \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq l_s \leq j^{sa} + j_{sa} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + j^{sa} = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$n \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$\begin{aligned}
f_z S_{j_{ik}, j_{sa}}^{DOST} = & \left( \sum_{k=l} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})} \sum_{l_s+j_{sa}-l}^{l_s+j_{sa}-l} \right. \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-l_{k_2}} \\
& \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - l_{k_2})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \left. \frac{(D + j_{sa} - l_{sa} - 1)!}{(D + j_{sa} - n - l_{sa} - 1)! \cdot (n + j_{sa} - j_{sa} - s)!} \right) + \\
& \left( \sum_{k=l} \sum_{(j_{ik}=l_s+n+j_{sa}^{ik}-D-1)}^{(j_{sa}+l_s-j_{sa}-1)} \sum_{l_s+j_{sa}-l}^{l_s+j_{sa}-l} \right. \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-l_{k_2}} \\
& \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - l_{k_2})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \left. \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \right)
\end{aligned}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l} \sum_{(j_{ik}=l_s+n+j_{sa}^{ik}-D-1)}^{(l_s+j_{sa}^{ik}-l)} \sum_{j^{sa}=l_s+j_{sa}-l+1}^{l_{sa}-l+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}}$$

$$\frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_{ik} - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l_{k_1} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + j_{sa}^{ik} - j^{sa} - l_{k_1})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l} \sum_{(j_{ik}=l_s+n+j_{sa}^{ik}-D-1)}^{(l_s+j_{sa}^{ik}-l)} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-l+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}}$$

$$\frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \sum_{k=l}^{\binom{()}{l_s}} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(l_i+n+...-D-s)} \sum_{(n_i-j_s)}^{(n+l_k)} \sum_{(n_{is}+j_{sa}^{ik}-l_{k_1})}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!}{(2 \cdot n_{is} + 2 \cdot j_{sa} - n_{sa} - j^{sa} - n - j_{sa}^{ik} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!} \frac{1}{(n-s)!} \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \frac{(D - l_i)!}{(j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n \wedge l_s > D - n + 1 \wedge$$

$$D + l_s + j_{sa} - j_{sa}^{ik} + 2 \leq l \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, \dots, l_{k_2}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l} \sum_{(j_{ik}=l_s+n+j_{sa}^{ik}-D-1)}^{(l_s+j_{sa}^{ik}-l)} \sum_{j_{sa}=l_{sa}+n-D}^{l_{sa}-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!}$$

$$\frac{(l_{ik} - l_{sa} - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{ik} - j_{sa} - 1)!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(l_s+j_{sa}^{ik}-l)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{()}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}$$

$$\frac{1}{(n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned} \sum_{j_{ik}, j_{sa}}^{DOST} &= \sum_{k=1}^n \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})} \sum_{j_{sa}^{sa-l}} \\ &\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \\ &\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \Big) + \end{aligned}$$



$$\begin{aligned}
 & \left( \sum_{k=l}^{(l_{sa}+n+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{(j_{ik}=l_s+n+j_{sa}^{ik}-D-1)} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-l+1} \right. \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - 1)!}{(j_{ik} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa}^{ik} - l_{sa} - s)!}{(D + j_{sa}^{ik} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})}^{(l_s+j_{sa}^{ik}-l)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{l_{sa}-l+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
 \end{aligned}$$

GÜLDÜZMAYA

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)} j^{sa} = i + j_{sa} - j_{sa}^{ik}$$

$$\sum_{n_{ij} = n + k}^n \sum_{(n_{is} = n_{is} + 1)} (j_{ik})$$

$$\sum_{n_{ij} = n_{is} + j_{sa}^{ik} - k_1}^{( )} (j^{sa} - k_2)$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa} - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot k_1 - 2 \cdot k_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - 2 \cdot j_{sa}^{ik} - 2 \cdot k_1 - 2 \cdot k_2)!}$$

$$\frac{1}{(n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} - s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$D \geq n < n \wedge l_s = D - n - 1 \wedge$

$j_{sa}^{ik} + \dots \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa}$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \dots + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 \geq l_s - n_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$

$D \geq n < n \wedge l = k > 0 \wedge$

$\dots \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k \wedge$

$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$

$$\begin{aligned}
 f_Z S_{j_{ik}, j^{sa}}^{DOST} &= \sum_{k=l} \sum_{(j_{ik}=j^{sa}+j_{sa}^{lk}-j_{sa})} \sum_{(l_{ik}+j_{sa}-l-j_{sa}^{lk}+1)} \\
 &\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 &\frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
 &\frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j^{sa} - l_{k_2})!} \cdot \\
 &\frac{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}{(j_{ik} - j_{sa} - 1)! \cdot (j_{ik} - j_{sa} - 1)!} \cdot \\
 &\frac{(D - l_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 &\sum_{k=l} \sum_{(j_{ik}=j^{sa}+j_{sa}^{lk}-j_{sa})} \sum_{(l_s+j_{sa}-l)}^{l_s+j_{sa}-l} \\
 &\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{lk}-j_{ik})}^{(n_i-j_s+1)} \\
 &\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{lk}-l_{k_1}} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \\
 &\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{lk} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{lk} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!} \cdot \\
 &\frac{1}{(n - s)!} \cdot \\
 &\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{lk} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{lk} - 1)!} \cdot \\
 &\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 \geq l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

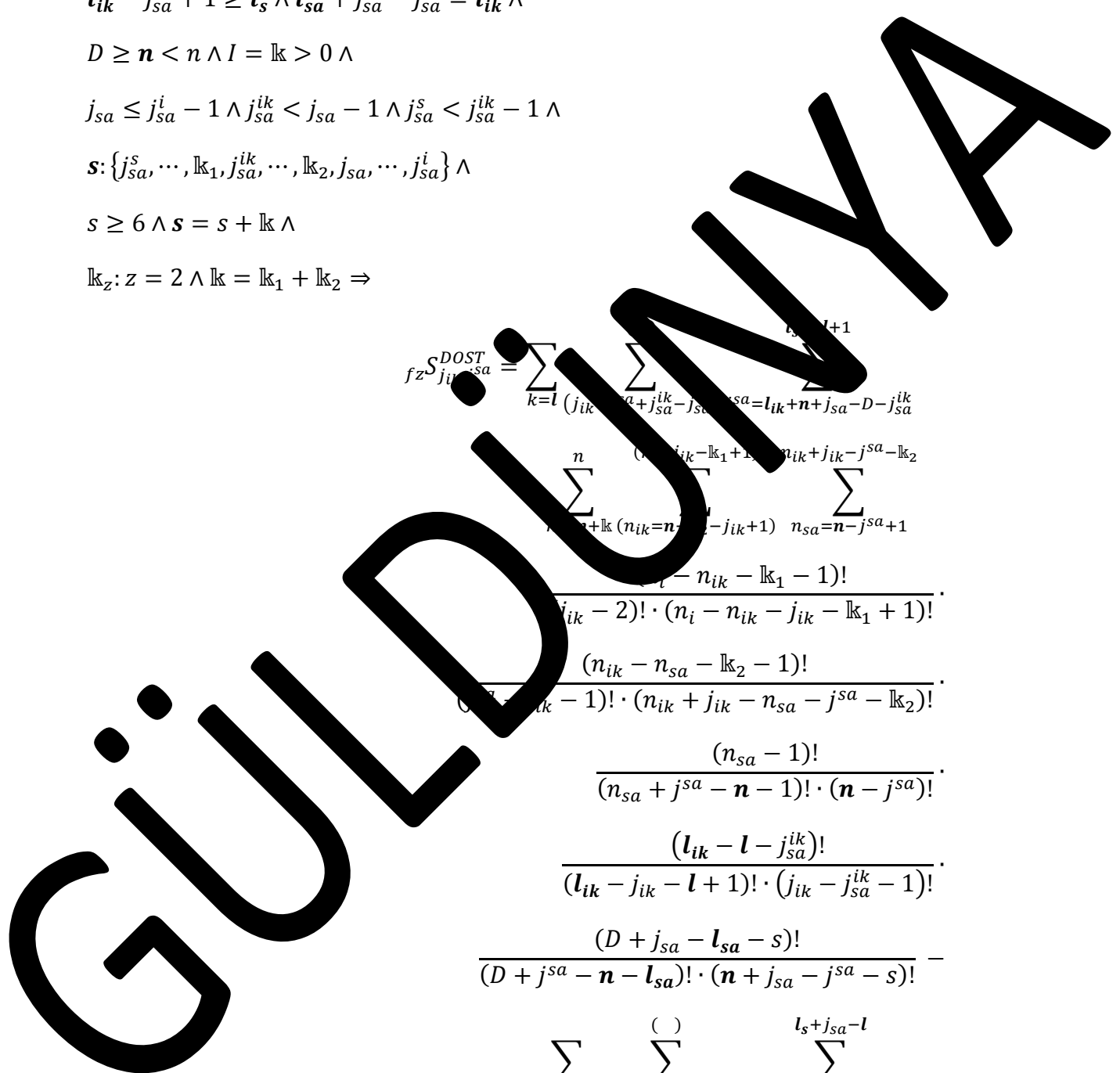
$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z S_{j_{ik}^{sa}}^{DOST} = \sum_{k=l}^l \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik})} \sum_{(n_{ik}=n+l_{ik}-j_{ik}+1)} \sum_{(n_{sa}=n-j^{sa}+1)} \frac{(n_{ik}-k_1-1)! \cdot (n_{ik}-k_2-1)! \cdot (n_{sa}-1)! \cdot (l_{ik}-l-j_{sa}^{ik})!}{(j_{ik}-2)! \cdot (n_i-n_{ik}-j_{ik}-k_1+1)! \cdot (n_{ik}-n_{sa}-k_2-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-k_2)! \cdot (n_{sa}+j^{sa}-n-1)! \cdot (n-j^{sa})! \cdot (l_{ik}-j_{ik}-l+1)! \cdot (j_{ik}-j_{sa}^{ik}-1)!} \cdot \frac{(D+j_{sa}-l_{sa}-s)!}{(D+j^{sa}-n-l_{sa})! \cdot (n+j_{sa}-j^{sa}-s)!} \sum_{k=l}^l \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(j^{sa}=l_{ik}+n+j_{sa}-D-s)} \sum_{n_{i=n+k}}^n \sum_{(n_{is}=n+k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$



$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{lk}-\mathbb{k}_1} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \binom{(\quad)}{\quad}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{lk} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{lk} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}$$

$$\frac{\binom{(n-l)}{(l_s-l-1)!} \cdot \binom{(l_s+l_{sa}-j_{ik}-l)! \cdot (j_{ik}-\mathbb{k}_1-1)!}{(D-j^{sa}-s-n-l_i-j_{sa})! \cdot (n_{ik}+j_{sa}-j^{sa}-\mathbb{k}_2)!}}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{lk} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{lk} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{lk} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{lk} + 1 \geq l_s \wedge l_{sa} + j_{sa}^{lk} - j_{sa} = l_{ik}$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^{lk} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{lk} - 1$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{lk}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^l\} \wedge$$

$$s \geq 6 \wedge s = \dots + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \dots + \mathbb{k}_2$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{lk}-D-j_{sa})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{lk}} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - l_{sa} - j_{sa}^{ik})} \sum_{(n_{is} = j_{ik} - j_{sa}^{ik})} \sum_{(n_i = n + \mathbb{k})} \sum_{(n_{ik} = n_{is} + j_{sa}^{ik} - \mathbb{k}_1)} \sum_{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - j^{sa} - s - \mathbb{k} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{sa}^{ik} - n_{sa} - j^{sa} - n - j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!} \cdot \frac{1}{(n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$D \geq n \wedge l_s > D - 1 + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} - j_{sa}^{ik} + j_{sa} - j_{sa} \wedge$

$j_{ik} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + j_{sa} \geq l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$

$D \leq n < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + \mathbb{k} \wedge$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik} j^{sa}}^{DOST} = \sum_{k=l}^{(l_{sa} + j_{sa}^{ik} - l - j_{sa} + 1)} \sum_{(j_{ik} = l_{ik} + n - D)} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - j_{ik} + 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - 1)!}$$

$$\frac{(n_{sa} - j^{sa} - 1)!}{(n_{sa} - j^{sa} - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{sa}^{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - l_{sa} - s)! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - \mathbb{k}_1}^{(\quad)} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\quad)}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}$$

$$\frac{1}{(n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

GÜLDÜŞMÜŞA

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$\begin{aligned} & \sum_{j_{ik}, j_{sa}^{ik}}^{D, s} \sum_{j_{ik}=l_s+n+j_{sa}^{ik}-1}^{j_{sa}^{ik}-j_{sa}} \sum_{j_{sa}^{ik}=l_i+n+j_{sa}-D-s}^{l_s+j_{sa}-l} \\ & \sum_{n+k}^{(n_i-n-k_1+1)} \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{n_{ik}+j_{ik}-j_{sa}-k_2} \sum_{n_{sa}=n-j_{sa}+1} \\ & \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \\ & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\ & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\ & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\ & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\ & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \end{aligned}$$

GÜLDENMYA



$$\begin{aligned}
 & \sum_{k=l} \sum_{(j_{ik}=l_s+n+j_{sa}^{ik}-D-1)}^{(l_s+j_{sa}^{ik}-l)} \sum_{j^{sa}=l_s+j_{sa}-l+1}^{l+j_{sa}-l-s+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_i + j^{sa} - n - 1)!}{(n_i - 1)!} \cdot (n - j^{sa})! \\
 & \frac{(l_{ik} - j_{ik} - 1)!}{(l_{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - 1)!}{(j_{ik} + j_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \\
 & \sum_{k=l} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{( )} \sum_{j^{sa}=l_{sa}+n-D}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{( )} \\
 & \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!} \\
 & \frac{1}{(n - s)!} \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}
 \end{aligned}$$

GÜLDÜZMAYA

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned} & \sum_{j_{ik}, j_{sa}^{ik}}^{D, s} \sum_{j_{ik} = l_s + n + j_{sa}^{ik} - 1}^{l_i + j_{sa}^{ik} - D - s - 1} \sum_{j_{sa} = l_i + n + j_{sa} - D - s}^{l_i + j_{sa} - l - s + 1} \\ & \sum_{n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1}^{(n_i - n_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2} \\ & \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\ & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\ & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\ & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\ & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\ & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \end{aligned}$$

$$\begin{aligned}
 & \sum_{k=l} \sum_{\substack{(l_s + j_{sa}^{ik} - l) \\ (j_{ik} = l_i + n + j_{sa}^{ik} - D - s)}} \sum_{\substack{l_i + j_{sa} - l - s + 1 \\ j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}} \\
 & \sum_{n_i = n + \mathbb{k}}^n \sum_{\substack{(n_i - j_{ik} - \mathbb{k}_1 + 1) \\ (n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}} \sum_{\substack{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2 \\ n_{sa} = n - j^{sa}}} \\
 & \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n - j^{sa} - 1)!}{(n_i + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - j_{ik} - 1)!}{(l_i - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - 1)!}{(j_{ik} + j_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \\
 & \sum_{\substack{(l_{ik} - l + 1) \\ (j_{ik} = l_{sa} + n + j_{sa}^{ik} - D - j_{sa})}} \sum_{\substack{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}} \\
 & \sum_{n_i = n + \mathbb{k}}^n \sum_{\substack{(n_i - j_s + 1) \\ (n_{is} = n + \mathbb{k} + j_{sa}^{ik} - j_{ik})}} \\
 & \sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - \mathbb{k}_1} \sum_{\substack{(\quad) \\ (n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}} \\
 & \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!} \\
 & \frac{1}{(n - s)!} \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}
 \end{aligned}$$

GÜLDÜZYAZ

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{ik} < j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \dots, j_{sa}^i, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + 1 \wedge$$

$$\mathbb{k}_z: z \geq 2 \wedge \mathbb{k} = \mathbb{k}_1 + 1 \Rightarrow$$

$$fz S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(\quad)} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\quad)} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{\binom{l_{sa} - l}{n_{sa} - l}} \sum_{\substack{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa} \\ j_{sa} = l_i + n + j_{sa} - D - s}} \sum_{n_i = n + k}^{\binom{n_i}{n + k + j_{sa}^{ik} - j_{ik}}} \sum_{n_{ik} = n_{is} + j_{sa}^{ik} - k_1}^{\binom{n_{ik}}{n_{is} + j_{sa}^{ik} - k_1}} \sum_{n_{ik} = n_{ik} + j_{ik} - j^{sa} - k_2}^{\binom{n_{ik}}{n_{ik} + j_{ik} - j^{sa} - k_2}} \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - j^{sa} - s - k - 2 \cdot k_1 - 2 \cdot k_2)!}{(2 \cdot n_{is} + 2 \cdot j_{sa}^s - n_{sa} - j^{sa} - n - j_{sa}^{ik} - 2 \cdot k_1 - 2 \cdot k_2)!} \cdot \frac{1}{(n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}}^{D, T} = \sum_{k=l}^{(l_{sa} + j_{sa}^{ik} - j_{sa} + 1)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)}^{(n - \mathbb{k}_1 + 1)} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}^{(n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)} \sum_{n_i = n + \mathbb{k}_1}^{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{(n_i - n_{ik} - \mathbb{k}_1 - 1)}$$

$$\frac{(n_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}{(j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(l_{ik} - l - j_{sa}^{ik})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)}^{(n - \mathbb{k}_1 + 1)} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}^{(n_i - j_s + 1)} \sum_{n_i = n + \mathbb{k}_1}^{(n_{is} = n + \mathbb{k}_2 + j_{sa}^{ik} - j_{ik})}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{\binom{()}{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}$$

$$\frac{(n - l)!}{(l_s - l - 1)! \cdot (j_{ik} - \mathbb{k}_1 - 1)!} \cdot \frac{(D - l)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (j_{sa}^s - j^{sa} - \mathbb{k}_2)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge (l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge (l_i + j_{sa} - s = l_{sa})) \wedge$$

$$D \geq n < n \wedge l_s > 0 \wedge$$

$$j_{sa} \leq j_{sa} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > n \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z^{S_{j_{ik}, j_{sa}^{DOST}}} = \sum_{k=l} \sum_{\binom{()}{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}} \sum_{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_i-j_{ik}-\mathbb{k}_1+1)}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{n_{sa}=n-j^{sa}+1}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa} - 1)!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa})!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=0}^{l_{ik} - j_{sa}^{ik} - 1} \sum_{l=0}^{l_s + j_{sa} - l} \sum_{m=0}^{n_{sa} - D - s} \sum_{n_{is} = n + \mathbb{k}}^{(n_i - j_s + 1)} \sum_{n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}^{(n_{is} = n + \mathbb{k} + j_{sa}^{ik} - j_{ik})} \frac{(2 \cdot n_{is} + j_{ik} - j_{sa}^{is} - n_{sa})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^{is} - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!} \cdot \frac{1}{(n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

- $(D \geq n \wedge l_s > D - n + 1 \wedge j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee (D \geq n < n \wedge l_s > D - n + 1 \wedge$



$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

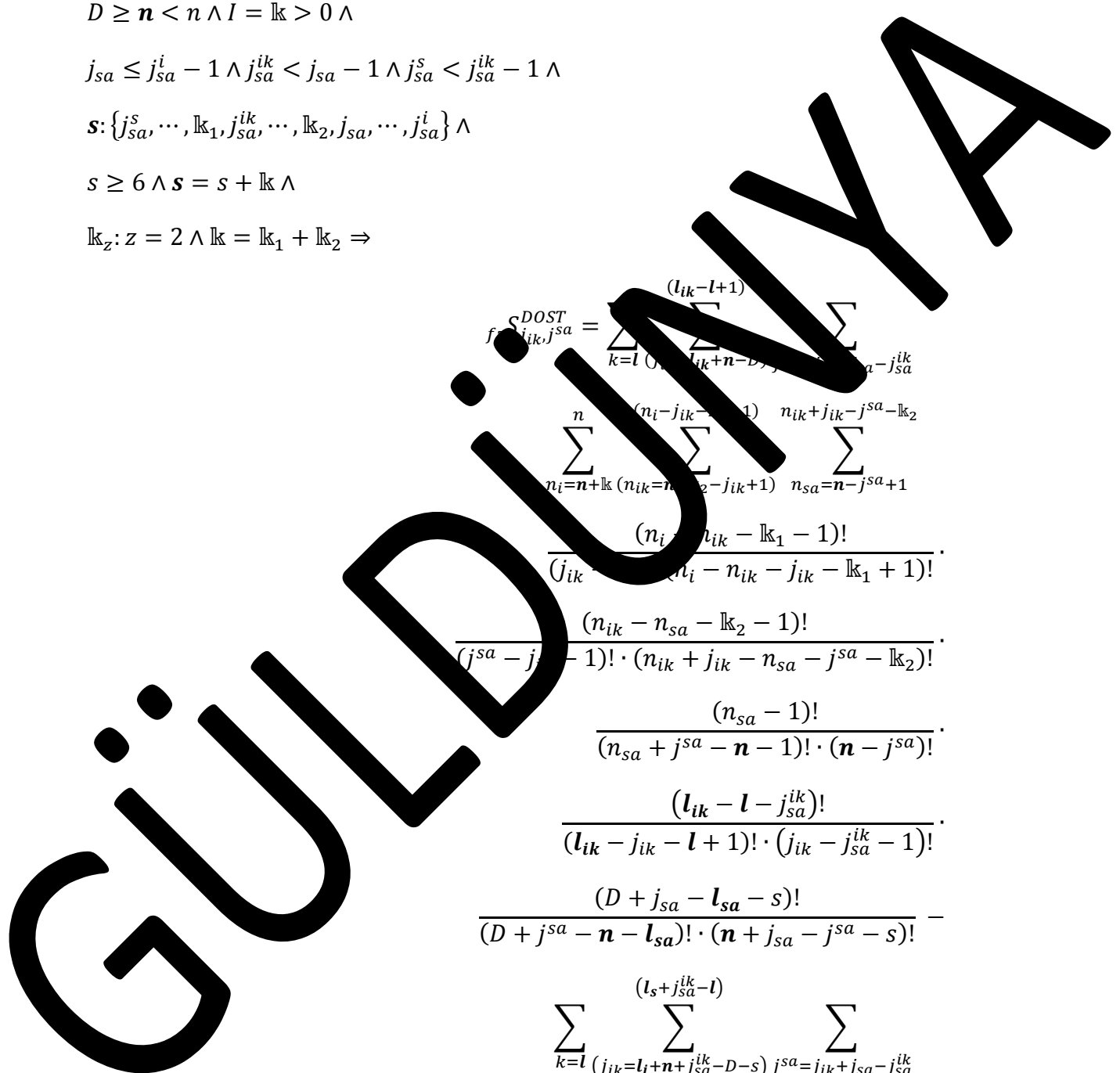
$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_{i_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{ik}-l+1)} \sum_{j_{sa}^{ik} = j_{sa} - j_{sa}^{ik}} \sum_{n_i = n+k}^n \sum_{n_{ik} = n_{sa} - j_{ik} + 1}^{(n_i - j_{ik} - l + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{ik} + j_{ik} - j_{sa} - k_2} \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - l + 1)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{sa}^{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{j_{sa}^{ik} = j_{ik} + j_{sa} - j_{sa}^{ik}} \sum_{n_i = n+k}^n \sum_{n_{is} = n+k + j_{sa}^{ik} - j_{ik}}^{(n_i - j_s + 1)}$$



$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}^{(\cdot)}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (j_{sa}^{ik} - j_{sa}^{ik} - 1)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge (l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge (l_i + j_{sa} - s = l_{sa})) \wedge$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa} \leq j_{sa} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > n \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z^{S_{j_{ik}j_{sa}^{DOST}}} = \sum_{k=l}^{(j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(j_{ik}=l_{ik}+n-D)}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_i-j_{ik}-\mathbb{k}_1+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\begin{aligned}
 & \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{(l_{ik} - l - j_{sa}^{ik})} \sum_{j_{ik}=j_{sa}^{ik} + n - D}^{l_i + j_{sa}^{ik} - 1} \sum_{j^{sa}=j_{sa}^{ik} - j_{ik} + 2}^{l_i + j_{sa}^{ik} - 1} \\
 & \sum_{n_i=n+l_{sa}+j_{sa}^{ik}+j_{ik}+\mathbb{k}_2-j_{ik}+1}^n \sum_{n_{sa}=n-j^{sa}+1}^{(n_i - j_{ik} - \mathbb{k}_1 + 1) \cdot (n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \\
 & \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{( )} \sum_{(j_{ik}=j_{sa}^{ik} + j_{sa}^{ik} - j_{sa})}^{( )} \sum_{j^{sa}=l_{sa}+n-D}^{l_s + j_{sa} - l}
 \end{aligned}$$

GÜLDİMYA

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}$$

$$\frac{1}{(s)!}$$

$$\frac{(l_s - i_{ik} - 1)!}{(l_s + i_{ik} - l)! \cdot (i_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D - j_{sa} + s - l_i - j_{sa}^{ik} - 1)! \cdot (n + j_{sa} - j_{sa}^{ik} - s)!}$$

$$\left( (D \geq n < n \wedge l_s > D - n + 1 \wedge j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee (D \geq n < n \wedge l_s > D - n + 1 \wedge j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \right) \wedge D \geq n < n \wedge \mathbb{k} > \mathbb{k} \wedge j_{sa}^{ik} = j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge s \geq 6 \wedge s = s + \mathbb{k} \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz S_{j_{ik} j_{sa}}^{DOST} = \sum_{k=l}^{(l_i+n+j_{sa}^{ik}-D-s-1)} \sum_{(j_{ik}=l_{ik}+n-D)}^{l_i+j_{sa}-l-s+1} \sum_{j_{sa}=l_i+n+j_{sa}-D-s}$$

$$\begin{aligned}
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{\substack{(n_i-j_{ik}-\mathbb{k}_1+1) \\ (n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}} \sum_{\substack{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2 \\ n_{sa}=n-j^{sa}+1}} \\
 & \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{k=l}^{l_{ik}-1} \frac{(l_{ik}-k-1)!}{(j_{ik}+k-j_{sa}^{ik}-D-s)!} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{l_{ik}+j_{sa}-l-s+1} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{\substack{(n_i-j_{ik}-\mathbb{k}_1+1) \\ (n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}} \sum_{\substack{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2 \\ n_{sa}=n-j^{sa}+1}} \\
 & \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -
 \end{aligned}$$

GÜLDÜŞÜK

$$\sum_{k=l}^{\sum_{j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa}} (l_s+j_{sa}^{ik}-l)} \sum_{j_{sa}^{ik}=j_{sa}^{ik}-D-j_{sa}} \sum_{j_{sa}^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \sum_{n_i=n+k}^n \sum_{n_{is}=n+k+j_{sa}^{ik}}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-k_1} \sum_{n_{sa}=n_{ik}+j_{sa}^{ik}-k_2}^{(\quad)} \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot k_1 - 2 \cdot k_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot k_1 - 2 \cdot k_2)!} \cdot \frac{1}{(n-s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(n + j_{sa} - j^{sa} - s)!}$$

- $((D \geq n < n \wedge l_s > D - n + 1 \wedge$
- $j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$
- $j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$
- $l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$
- $(D \geq n < n \wedge l_s > D - n + 1 \wedge$
- $j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$
- $j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$
- $l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$
- $(D \geq n < n \wedge l_s > D - n + 1 \wedge$
- $j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$
- $j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$
- $l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$
- $(D \geq n < n \wedge l_s > D - n + 1 \wedge$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_{ik, j_{sa}}^{DOST} = \sum_{k=l}^{(j_{sa} + j_{sa}^{ik} - j_{sa}) + j_{sa} - l - j_{sa}^{ik} + 1} \sum_{(j_{ik} = l_{ik} + n - D)} \sum_{n=D}^{n-D} \sum_{n_i=n+k}^n \sum_{(n_{ik}=n_{sa}-j_{ik}+1)}^{(n_i - j_{ik} - l + 1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik} + j_{ik} - j_{sa} - k_2} \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - l + 1)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{sa}^{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} + \sum_{k=l}^{(l_{ik} - l + 1)} \sum_{(j_{ik} = l_{ik} + n - D)} \sum_{j_{sa} = l_{ik} + j_{sa} - l - j_{sa}^{ik} + 2}^{l_{sa} - l + 1}$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - j_{sa})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} - l_{sa} - j_{sa})!}{(j_{ik} + j_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} - j_{sa}^{ik} - j_{sa})!} \cdot \\
 & \frac{(n_i + j_{sa} - n - s)!}{(n_i + j_{sa} - n - s)! \cdot (n_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^n \sum_{(j_{sa}^{ik}-j_{sa})}^{(j_{sa}^{ik}-j_{sa})} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_s+j_{sa}-l} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}}^{(n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1})} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \\
 & \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!} \cdot \\
 & \frac{1}{(n - s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

$((D \geq n < n \wedge l_s > D - n + 1 \wedge$



$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \wedge$$

$$D \geq n < n \wedge I = \dots > 0 \wedge$$

$$j_{sa}^{ik} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{s_1, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i, \dots, j\} \wedge$$

$$s \geq 6 \wedge \dots = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k}_2 = \mathbb{k}_1 + \dots \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{sa}+n+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{(j_{ik}=l_{ik}+n-D)}^{l_{sa}-l+1} \sum_{j_{sa}=l_{sa}+n-D}^{n} \sum_{(n_i-j_{ik}-\mathbb{k}_1+1)}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{n_{sa}=n-j_{sa}+1} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}.$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa})!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa})!} +$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{n_i=l_{sa}+n}^{(n_i-j_{ik}-j^{sa}-1)} \sum_{n_{sa}=n-j^{sa}+1}^{(l_{sa}-l+1)} \sum_{n_{sa}=n-j^{sa}+1}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_{sa}-j_{ik}+1)}^{(n_i-j_{ik}-j^{sa}-1)} \sum_{n_{sa}=n-j^{sa}+1}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1))!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_s+j_{sa}^{ik}-l)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(n_i-j_{ik}-j^{sa}-1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

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$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{()}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}$$

$$\frac{1}{(s)!}$$

$$\frac{(l_s - 1)!}{(l_s + j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D - j_{sa} + s - l_i - j_{sa}^{ik} - j_{sa}^{ik} - (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_s + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge l = s > 0 \wedge$$

$$j_s \leq j_{sa} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^{ik}\}$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k}_z = \mathbb{k}_1 + 1 \Rightarrow$$

$$f_z S_{j_{ik} j_{sa}}^{DOST} = \sum_{k=l} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})}^{() \quad l_s+j_{sa}-l} \sum_{j^{sa}=l_s+n+j_{sa}-D-1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{( )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}^{l_{sa}})} \sum_{(n_{sa}=l_i+n+j_{sa}-l_{sa})}$$

$$\sum_{(n_{is}=n+l_{ik}+j_{sa}^{ik}-j_{ik})}$$

$$\sum_{(n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}$$

$$\frac{1}{(n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s > n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{sa} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_s + n + j_{sa}^{ik} - D - 1)} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}} \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + j_{sa} - j_{sa}^{ik})}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{(n_{is} = n + \mathbb{k} + j_{sa}^{ik} - j_{ik})}^{(n_{ik} + j_{sa} - j_{sa}^{ik} - \mathbb{k}_2)}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - j_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - \mathbb{k}_2)!} \cdot \frac{(n - 1)!}{(n_{sa} - j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(n - l - j_{sa}^{ik})!}{(n_{sa} - j_{sa} - n - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \cdot \sum_{k=l}^{(l_s + j_{sa}^{ik} - l - j_{sa} + 1)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}} \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_{sa}^{ik} - j_{sa}^{ik} - \mathbb{k}_1}^{(\quad)} \sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)}^{(\quad)}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!} \cdot \frac{1}{(n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_{z^s} j_{ik}^{sa} = \sum_{k=l}^n \binom{l_i + j_{sa} - l - s + 1}{(j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa})} j^{sa} = l_i + n + j_{sa} - D - s$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{\binom{D}{k}} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{l_s+j_{sa}-l} j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k+j_{sa}^{ik}-j_{sa}^{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-k_1}^{\binom{D}{k_1}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-k_2)}^{\binom{D}{k_2}}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot k_1 - 2 \cdot k_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot k_1 - 2 \cdot k_2)!} \cdot \frac{1}{(n-s)!} \cdot \frac{(n-l-1)!}{(l_s+j_{sa}^{ik}-j_{ik}-1)! \cdot (j_{ik}-j_{sa}^{ik}-1)!} \cdot \frac{(D-j_i)!}{(D+j^{sa}+n-l_i-j)! \cdot (n+j_{sa}-j^{sa}-s)!}$$

$$D \geq n < n \wedge l_s > D - n \wedge l_i \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa}^{ik}$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa}^{ik} \leq n + j_{sa} - s$$

$$l_i - j_{sa}^{ik} + 1 \leq l_s \wedge l_{sa} - j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D > n < n \wedge l_i = n \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} < j_{sa}^{ik} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \leq s \wedge s = s + k \wedge$$

$$k_z: z = 2 \dots k = k_1 + k_2 \Rightarrow$$

$$f_z^{S_{j_{ik}, j_{sa}^{ik}}} = \sum_{k=l}^{\binom{D}{k}} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(l_i+j_{sa}^{ik}-l-s+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_{ik}-l_{k_1}+1) \\ (n_{ik}=n+l_{k_2}-j_{ik}+1)}} \sum_{\substack{n_{sa}=n-j^{sa}+1 \\ (n_{ik}+j_{ik}-j^{sa}-l_{k_2})}} \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - l - j_{sa})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_s - l - j_{sa} - s)!}{(l_s - j^{sa} - n - 1)! \cdot (n - j^{sa} - s)!} \cdot \sum_{k=l}^{(l_s+l)} \sum_{\substack{j_{ik}=j_{ik}+n-D \\ (j_{ik}+j_{sa}^{ik}-j_{sa}^{ik})}} \sum_{\substack{n_i=n+l_k \\ (n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}}^n \sum_{\substack{(n_i-j_s+1) \\ (n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}} \frac{(2 \cdot n_{is} - j_{ik} - j_{sa} - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!} \cdot \frac{1}{(n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$((D \geq n < n \wedge l_s > D - n + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$



$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_{j_{ik}, j_{sa}}^{SD} = \sum_{l=1}^{n+j_{sa}^{ik}-j_{sa}} \sum_{j_{ik}=l_s}^{n+j_{sa}^{ik}-D-1} \sum_{j_{sa}^{ik}=l_{sa}+n-D}^{l_s+j_{sa}-l} \\ \sum_{n+k}^n \sum_{n_{ik}=n+k_2-j_{ik}+1}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-k_2} \\ \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\begin{aligned}
& \sum_{k=l} \sum_{(j_{ik}=l_s+n+j_{sa}^{ik}-D-1)}^{(l_s+j_{sa}^{ik}-l)} \sum_{j^{sa}=l_s+j_{sa}-l+1}^{l_{sa}-l+1} \\
& \sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-k_2} \\
& \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
& \frac{(n_i + j^{sa} - n - 1)!}{(n_i - 1)!} \cdot (n - j^{sa})! \\
& \frac{(l_{ik} - j_{ik} - 1)!}{(l_{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - 1)!}{(j_{ik} + j_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \\
& \sum_{k=l} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\quad)} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-k_1}^{n} \sum_{(n_{is}=n+k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-k_1}^{(\quad)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{(\quad)} \\
& \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot k_1 - 2 \cdot k_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot k_1 - 2 \cdot k_2)!} \\
& \frac{1}{(n - s)!} \\
& \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}
\end{aligned}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz = \sum_{k=l}^{(l_{sa}+n+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{(j_{ik}=l_s+n+j_{sa}^{ik}-D-1)}^{l_{sa}-l+1} \sum_{j^{sa}=l_{sa}+n-D}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_{sa} + n + j_{sa}^{ik} - D - j_{sa})}^{l_{sa} - l + 1} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k + j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{(n_{is} = n + k + j_{sa}^{ik} - j_{ik} - k_2)}^{n_{ik} + j_{sa} - k_2}$$

$$\frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - k_1 - 1)! \cdot (n_i - n_{ik} - k_1 + 1)!}$$

$$\frac{(n_{ik} - k_2 - 1)!}{(n_{is} - k_2 - 1)! \cdot (n_{ik} + j_{sa} - n_{sa} - j_{ik} - k_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=l}^{(l_{ik} - l + 1)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)}^{(l_{ik} - l + 1)} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - k_1} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - k_2)}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot k_1 - 2 \cdot k_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot k_1 - 2 \cdot k_2)!}$$

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$$\frac{1}{(n-s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa})!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - n \wedge l_i \leq D + s - n \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(j^{sa} + j_{sa}^{ik} - j_{sa})} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_s + j_{sa} - l} \sum_{j^{sa} = j_{sa} + 1}^{n} \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - k_2} \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{j_{sa} = l + j_{sa} - l + 1}^{l_{sa} - l + 1}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{(n_{is} = n + k + j_{sa}^{ik} - j_{ik} - k_2)}^{(n_{ik} + j_{sa}^{ik} - j^{sa} - k_2)}$$

$$\frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - k_1 - 1)! \cdot (n_i - n_{ik} - k_1 + 1)!}$$

$$\frac{(n_{ik} - k_2 - 1)!}{(j^{sa} - j_{ik} - k_2 - 1)! \cdot (n_{ik} + j_{sa}^{ik} - n_{sa} - j^{sa} - k_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(k - l - j_{sa}^{ik})!}{(l_{ik} - k - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=l}^{( )} \sum_{(j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa})} \sum_{j_{sa} = j_{sa} + 1}^{l_s + j_{sa} - l}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - k_1} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - k_2)}^{( )}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot k_1 - 2 \cdot k_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot k_1 - 2 \cdot k_2)!}$$

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$$\frac{1}{(n-s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa})!}$$

$$D \geq n < n \wedge l \neq j_{sa} \wedge l_{sa} \leq D + j_{sa} - n \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$S_{j_{ik} j_{sa}}^{DOST} = \left( \sum_{k=l} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{j^{sa}=j_{sa}+1}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-k_2} \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \right) \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\begin{aligned}
& \left( \sum_{k=l}^{(j^{sa} + j_{sa}^{ik} - j_{sa} - 1)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)} \sum_{j^{sa} = j_{sa} + 2} \right. \\
& \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa}}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \\
& \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - l)!}{(j_{ik} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \\
& \frac{(D + j_{sa}^{ik} - l_{sa} - s)!}{(D + j_{sa}^{ik} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=l}^{(l_{ik} - l + 1)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)} \sum_{j^{sa} = l_{ik} + j_{sa} - l - j_{sa}^{ik} + 2}^{l_{sa} - l + 1} \\
& \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \\
& \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}
\end{aligned}$$



$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa}^{ik} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \left( \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \right) -$$

$$\sum_{k=l}^{(\cdot)} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})}^{(\cdot)} \sum_{j_{sa}=j_{sa}+1}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{n=n+\mathbb{k}}^n \sum_{(n_{is}=n)}^{(n_{is}+1)} \sum_{j_{ik}}^{(j_{ik})}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa} - n_{sa} - j_{sa}^{ik} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j_{sa}^{ik} - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!} \cdot \frac{1}{(n-s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j_{sa}^{ik} - s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

- $D \geq n < n \wedge l_{sa} \leq l \wedge l_s \geq D - n \wedge l_i \leq l$
- $j_{sa}^{ik} \leq j_{sa}^{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge j_{sa}^{ik} \leq j_{sa}^{ik} - 1$
- $j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j_{sa}^{ik} \leq n + j_{sa} - s \wedge j_{sa}^{ik} \leq j_{sa}^{ik} - 1$
- $l_{ik} - j_{sa}^{ik} + 1 = l_s - l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_{sa} \leq D + j_{sa}^{ik} - n \wedge l_i \leq l$
- $n \geq n \wedge I = \mathbb{k} > 0 \wedge j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge s \geq 6 \wedge s = s + \mathbb{k} \wedge$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z^{\mathcal{S}DOST}_{j_{ik}, j^{sa}} = \left( \sum_{k=l} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(j^{sa}=j_{sa}+1)} \frac{\binom{l_s+j_{sa}-l}{j^{sa}=j_{sa}+1}}{\binom{n_i-j_{ik}-\mathbb{k}_1+1}{n_{ik}=n+\mathbb{k}_2-j_{ik}+1} \binom{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}{n_{sa}=n-j^{sa}+1}} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) +$$

$$\left( \sum_{k=l} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{(j^{sa}=j_{sa}+2)} \frac{\binom{l_s+j_{sa}-l}{j^{sa}=j_{sa}+2}}{\binom{n_i-j_{ik}-\mathbb{k}_1+1}{n_{ik}=n+\mathbb{k}_2-j_{ik}+1} \binom{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}{n_{sa}=n-j^{sa}+1}} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \right)$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{sa} - l + 1} \sum_{j^{sa} = l_s + j_{sa} - l + 1}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa}}$$

$$\frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - k_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j^{sa} - k_2 - 1)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (j^{sa} - 1)!} \cdot$$

$$\frac{(l_{ik} - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + j_{sa}^{ik} - j_{sa}^{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\left( \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) -$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - k_1} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - k_2)}^{()}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot k_1 - 2 \cdot k_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot k_1 - 2 \cdot k_2)!} \cdot$$

$$\frac{1}{(n - s)!} \cdot$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_{sa} \leq D + j_{sa} - n \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$\sum_{k=l}^{l+1} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-k_2} \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\begin{aligned}
& \left( \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_{sa}-l+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1} \right. \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}^{ik}}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
& \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j^{sa} - l_{k_2})!} \cdot \\
& \frac{(n_i + j^{sa} - n - 1)! \cdot (n - j^{sa} - 1)!}{(n_i - j_{ik} - l_{k_1} + 1)! \cdot (j_{ik} - j_{sa} - 1)!} \cdot \\
& \frac{(l_{sa} + j_{ik} - l_{ik} - j_{sa})!}{(j_{ik} + j_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \left. \frac{(D + j_{sa} - n_{sa} - s)!}{(D + j_{sa} - n_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) - \\
& \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_{sa}-l+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}}^{(n_{ik}-l+1)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{(n_{sa}-l+1)} \\
& \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!} \cdot \\
& \frac{1}{(n - s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}
\end{aligned}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - n \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$\begin{aligned} & \sum_{k=1}^{D-j_{sa}^{ik}-l} \sum_{l_k=j_{sa}^{ik}+1}^{j_{sa}^{ik}-l} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \\ & \sum_{i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-k_2} \\ & \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \\ & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\ & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\ & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\ & \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \end{aligned}$$

$$\begin{aligned}
 & \left( \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{sa} - l + 1} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik} + 1} \right. \\
 & \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa}}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \\
 & \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_i - 1)!}{(n_i - j^{sa} - n - \mathbb{k}_1 - 1)! \cdot (n - j^{sa})!} \\
 & \frac{(l_{ik} - l - j_{ik} - 1)!}{(l_{ik} - j_{ik} - l - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - 1)!}{(j_{ik} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \\
 & \left. \frac{(n_i + j_{ik} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) - \\
 & \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{sa} - l + 1} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}} \\
 & \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)} \\
 & \sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - \mathbb{k}_1}^{(\quad)} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\quad)} \\
 & \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!} \\
 & \frac{1}{(n - s)!} \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}
 \end{aligned}$$

GÜLDÜZ

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - n \wedge l_i \leq D + s - n \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_{z \in \mathcal{S}}^{ST} = \sum_{k=1}^{j_{sa}^{ik}-l} \sum_{k=j_{sa}^{ik}+1}^{l_{sa}-l+1} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{l_{sa}-l+1}$$

$$\sum_{i=n+k}^n \sum_{n_{ik}=n+k_2-j_{ik}+1}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-k_2}$$

$$\frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$



$$\sum_{k=1}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} + j_{sa}^{ik} - (n_i - j_s + 1))}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - \mathbb{k}_1} \sum_{(n_{sa} = n_{ik} + j_{sa}^{ik} - \mathbb{k}_2)}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!} \cdot \frac{1}{(n - s)!} \cdot \frac{(n - l - 1)!}{(l_s + j_{sa}^s - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(n + j_{sa} + s - n - l_i - j)! \cdot (n + j_{sa} - j^{sa} - s)!}$$

- $D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$
- $2 \leq l \leq D + l_{ik} + j_{sa} - n - l_s - j_{sa}^{ik} + 1 \wedge$
- $j_{sa}^{ik} \leq j_{sa} \leq j^{sa} + j_{sa} - j_{sa} - 1 \wedge$
- $j_{sa}^{ik} + j_{sa} - j_{sa}^{ik} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$
- $l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge j_{sa}^{ik} + j_{sa} - j_{sa} > l_{ik} \wedge$
- $D + j_{sa} - n < l_{sa} \leq D - l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$
- $D \geq n < n \wedge \mathbb{k} > 1 \wedge$
- $j_{sa} \leq j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$
- $s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$
- $s \geq 6 \wedge s = s + \mathbb{k} \wedge$
- $\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$\begin{aligned}
f_Z S_{j_{ik}, j^{sa}}^{DOST} = & \left( \sum_{k=l} \sum_{(j_{ik}=j^{sa}+j_{sa}^{lk}-j_{sa})} \sum_{j^{sa}=l_{sa}+n-D}^{l_{ik}+j_{sa}-l-j_{sa}^{lk}+1} \right. \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
& \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{lk})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{lk} - 1)!} \cdot \\
& \left. \frac{(D + j_{sa} - l_{sa})!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \\
& \left( \sum_{k=l}^{(j^{sa}+j_{sa}^{lk}-j_{sa}-1)} \sum_{(j_{ik}=j_{sa}^{lk}+1)} \sum_{j^{sa}=l_{sa}+n-D}^{l_{ik}+j_{sa}-l-j_{sa}^{lk}+1} \right. \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
& \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{lk} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{lk} - j_{ik} - j_{sa})!} \cdot
\end{aligned}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_{sa}-l+1} j^{sa}=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j^{sa}}$$

$$\frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - l_{k_1} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j^{sa} - l_{k_2})!} \cdot$$

$$\frac{(n_{sa} + j_{sa} - n - 1)!}{(j^{sa} - 1)!} \cdot$$

$$\frac{(l_{ik} - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(l_{sa} + j_{sa}^{ik})! \cdot (l_{ik} - j_{sa})!}{(j_{ik} + j_{sa} - j^{sa} - 1)! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\left( \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) -$$

$$\sum_{k=l}^{( )} \sum_{(j_{ik}=j_{sa}^s+j_{sa}^{ik}-j_{sa})}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} j^{sa}=l_i+n+j_{sa}-D-s$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{( )}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!} \cdot$$

$$\frac{1}{(n - s)!} \cdot$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 2 \leq l \leq i \wedge l - 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2$$

$$\begin{aligned} j_{ik} j_{sa}^{DOST} &= \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_{sa}-l+1} \sum_{j^{sa}=l_{sa}+n-D} \\ &\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\ &\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \\ &\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \end{aligned}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+l}^n \sum_{(n_{is}+j_{sa}^{ik}-j_{ik})}^{(n_{is}+l+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}}^{(n_{ik}-l+1)} \sum_{(n_{ik}-j_{sa}-l_{k_2})}^{(n_{ik}-l+1)}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa} - n_{sa} - j_{sa} - s - j_{sa} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa} - n_{sa} - j_{sa} - s - 2 \cdot j_{sa} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!} \cdot \frac{1}{(n-s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j_{sa} - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

- $D \geq n < n \wedge l = l \wedge l_s = D - n + 1 \wedge$
- $2 \leq l < D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$
- $j_{sa}^{ik} \leq j_{ik} - j_{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$
- $j_{ik} + j_{sa} - j_{sa}^{ik} + j_{sa} \leq n + j_{sa} - s \wedge$
- $l_{ik} - j_{sa}^{ik} + j_{sa} = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$
- $l_{sa} + j_{sa}^{ik} < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$
- $D \geq n < n \wedge l = l > 0 \wedge$
- $j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$
- $s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, \dots, l_{k_2}, j_{sa}, \dots, j_{sa}^l\} \wedge$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j^{sa}}^{DOST} = \left( \sum_{k=l} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{l_s+j_{sa}-l}^{l_s+j_{sa}-l} j^{sa=l_{sa}+n-D} \right.$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-1} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) +$$

$$\left( \sum_{k=l} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(j^{sa}+j_{sa}^{ik}-j_{sa}-1)} \sum_{j^{sa}=l_{sa}+n-D}^{l_s+j_{sa}-l} \right.$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\left. \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \right)$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa}^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} +$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{sa} - l + 1} j_{sa}^{sa} = l + j_{sa} - l + 1$$

$$\sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{(n_{is} = n + k + j_{sa}^{ik} - j_{ik} - k_2)}^{n_{ik} + j_{sa}^{ik} - j_{sa} - k_2}$$

$$\frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - j_{sa} - k_1 - 1)! \cdot (n_i - n_{ik} - j_{sa} - k_1 + 1)!}$$

$$\frac{(n_{ik} - n_{is} - k_2 - 1)!}{(j_{sa} - j_{ik} - k_2 - 1)! \cdot (n_{ik} + j_{sa}^{ik} - n_{sa} - j_{sa} - k_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa}^{sa} - n - 1)! \cdot (n - j_{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa}^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} -$$

$$\sum_{k=l}^{( )} \sum_{(j_{ik} = j_{sa}^{sa} + j_{sa}^{ik} - j_{sa})}^{l_s + j_{sa} - l} j_{sa}^{sa} = l_i + n + j_{sa} - D - s$$

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^{sa} - j_{sa}^{ik} - k_1}^{( )} \sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - k_2)}^{( )}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - s - j_{sa}^{ik} - 2 \cdot k_1 - 2 \cdot k_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot k_1 - 2 \cdot k_2)!}$$

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$$\frac{1}{(n-s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa})!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 2 \leq l \leq i - 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^l, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_Z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{sa} - l + 1} \sum_{j_{sa} = l_{sa} + n - D}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$



$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - l_s - l_{sa} - j_{sa} - j_{sa}^{ik} - j_{sa}^{ik})}$$

$$\sum_{(n + l_k)}^{(n_i - j_s)} \sum_{(n_{is} + l_k + j_{sa}^{ik} - j_{ik})}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^{ik} - l_{k_1}} \sum_{(n_{ik} + j_{ik} - j^{sa} - l_{k_2})}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!}{(2 \cdot n_{is} + 2 \cdot j_{sa}^{ik} - n_{sa} - j^{sa} - n - j_{sa}^{ik} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!}$$

$$\frac{1}{(n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$l \geq n < n \wedge l \neq i \wedge l \leq D - n + 1 \wedge$$

$$2 \leq l < D + l_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} - j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{sa}^{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \left( \sum_{k=l} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})}^{(l_{ik}-l+1)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}} \right. \\ \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \\ \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\ \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - \mathbb{k}_2)!} \cdot \\ \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \\ \frac{(n - l - j_{sa}^{ik})!}{(n - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\ \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \right) + \\ \left( \sum_{k=l} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(l_{sa}+n+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{j_{sa}=l_{sa}+n-D}^{l_{sa}-l+1} \right. \\ \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \\ \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\ \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \cdot \\ \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot$$

$$\begin{aligned}
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})}^{l_{sa}+l+1} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1)}^{l_{sa}+l+1} \\
 & \sum_{n_i=n+l_{sa}}^n \sum_{(n_i-j_{ik}-l_{sa}+1)}^{(n_i-j_{ik}-l_{sa}+1)} \sum_{(n_{sa}=n-j^{sa}+1)}^{n_{ik}+j_{ik}-l_{sa}-l_{sa}+1} \\
 & \frac{(n_{ik}-l_{sa}-l_{sa}+1)!}{(j_{ik}-l_{sa}-l_{sa}+1)! \cdot (n_{ik}-n_{sa}-j_{ik}-l_{sa}+1)!} \cdot \\
 & \frac{(n_{ik}-n_{sa}-l_{sa}-l_{sa}+1)!}{(j^{sa}-l_{sa}-l_{sa}-1)! \cdot (n_{ik}-j_{ik}-n_{sa}-j^{sa}-l_{sa})!} \cdot \\
 & \frac{(n_{sa}-1)!}{(j^{sa}-n-1)! \cdot (n-j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) - \\
 & \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{l_{sa}+l+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{l_{sa}+l+1} \\
 & \sum_{n_i=n+l_{sa}}^n \sum_{(n_{is}=n+l_{sa}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{sa}-l_{sa}}^{( )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{sa})}^{( )}
 \end{aligned}$$

GÜLDÜZMAYA

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!} \cdot \frac{1}{(n-s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - l)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 0 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_2 \cdot z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2$$

$$f_z S_{j_{ik} j_{sa}}^{DOST} = \left( \sum_{k=l} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})}^{(l_s+j_{sa}^{ik}-l)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \right)$$

$$\begin{aligned}
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \left( \sum_{k=l}^{(l_{sa} + n + j_{sa}^{ik} - D - j_{sa} - 1)} \sum_{(j_{ik} = j_{sa}^{ik} + j^{sa} = j_{sa} - l + 1)} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik} + 1}^{n - D} \right) \cdot \\
 & \sum_{n_i = n + \mathbb{k}_1}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \\
 & \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_{sa} + n + j_{sa}^{ik} - D - j_{sa})}^{l_{sa} - l + 1} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik} + 1} \\
 & \sum_{n_i = n + \mathbb{k}_1}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \\
 & \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
 \end{aligned}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - 1)!}$$

$$\sum_{j_{ik}=l_i+n_{ik}-D-s}^{(l_i+j_{sa}^{ik}-l)}$$

$$\sum_{i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{i=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1}^{( )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^{ik} - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^{ik} - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}$$

$$\frac{1}{(n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$n - l \neq i \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \dots$$

$$\sum_{n_i=n+\mathbb{k}_1}^n \sum_{(n_i-j_{ik}+1)}^{(n_i-j_{ik}+1)} \sum_{(n_{is}=n+\mathbb{k}_1+j_{sa}^{ik}-j_{ik})}^{(n_{is}=n+\mathbb{k}_1+j_{sa}^{ik}-j_{ik})} \dots$$

$$\frac{(n_{is}-n_{ik})}{(j_{ik}-2)! \cdot (n_{is}-n_{ik}-j_{ik}-\mathbb{k}_1+1)!} \cdot \frac{(n_{ik}-j_{sa}-\mathbb{k}_2+1)!}{(j_{sa}^{ik}-j_{ik}-1)! \cdot (n_{ik}-j_{ik}-n_{sa}-j_{sa}-\mathbb{k}_2)!} \cdot \frac{(n_{sa}-1)!}{(j_{sa}-n-1)! \cdot (n-j_{sa})!} \cdot \frac{(l_{ik}-l-j_{sa}^{ik})!}{(l_{ik}-j_{ik}-l+1)! \cdot (j_{ik}-j_{sa}^{ik}-1)!} \cdot \frac{(D+j_{sa}-l_{sa}-s)!}{(D+j_{sa}-n-l_{sa})! \cdot (n+j_{sa}-j_{sa}-s)!}$$

$$\sum_{k=l}^{(l_s+j_{sa}^{ik}-l)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \dots$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{( )}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}$$

$$\frac{1}{(n-s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa})!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge l_i \leq D + s - n \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz = \sum_{k=l}^{(l_{sa} + j_{sa}^{ik} - l - j_{sa} + 1)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}} \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$



$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{j_{sa}^{ik} - j_{sa}^{ik}} j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n - j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - k_2} \sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa}^{ik} - k_2)}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - j_{sa}^{ik} - 2 \cdot k_2 - 2 \cdot k_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - j_{sa}^{ik} - 2 \cdot k_2 - 2 \cdot k_2)!}$$

$$\frac{1}{(n - s)!}$$

$$\frac{(j_{sa} - l - 1)!}{(j_{sa} + j_{sa}^{ik} - j_{sa}^{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(j_{sa} - l_i)!}{(D + j^{sa} + j_{sa} - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l \neq l_i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa}^{ik} + j_{sa}^{ik} - j_{sa}^{ik} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa}^{ik} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_{sa} \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq l_i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa}^{ik} + j_{sa}^{ik} - j_{sa}^{ik} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa}^{ik} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z^{\mathcal{S}^{DOST}}_{j_{ik}, j_{sa}} = \sum_{k=l}^{(j_{sa} + j_{sa}^{ik} - j_{sa})} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1} \sum_{j_{sa} = l_i + j_{sa} - D - s}^{l_i + j_{sa} - l - j_{sa}^{ik} + 1} \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j_{sa}}^{n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2} \frac{(n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{sa} - j_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} + \sum_{k=l}^{(l_{ik} - l + 1)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_i + j_{sa} - l - s + 1} \sum_{j_{sa} = l_{ik} + j_{sa} - l - j_{sa}^{ik} + 2}^{l_i + j_{sa} - l - s + 1} \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{( )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(l_i=n+l_{sa}-k+1)} \sum_{(n_{is}+k(n_{is}=n+k+j_{sa}^{ik}-j_{ik}))} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)} \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot k_1 - 2 \cdot k_2)!}{(2 \cdot n_{is} + 2 \cdot n_{sa} + j_{sa}^s - n_{sa})! \cdot (j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot k_1 - 2 \cdot k_2)!} \cdot \frac{1}{(n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l \neq l_i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq l_i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz^{SDOST}_{j_{sa}} = \sum_{k=l}^{(l_i+n-j_{sa}^{ik}-D)} \sum_{j_{sa}^{ik}=j_{sa}^{ik}+1}^{(l_i+n-j_{sa}^{ik}-D)} \sum_{j_{sa}=l_i+n+j_{sa}-D-s}^{(l_i+n-j_{sa}^{ik}-D)} \frac{(n_{ik}-k-\mathbb{k}_1+1)! \cdot n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}{n_{ik}+\mathbb{k} (n_{ik}=n_{sa}-j_{ik}+1) \quad n_{sa}=n-j_{sa}+1} \cdot \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} + \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{l_i+j_{sa}-l-s+1} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$



$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_{ik}-l_{k_1}+1) \\ (n_{ik}=n+l_{k_2}-j_{ik}+1)}} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - j_{sa})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} - l_{sa} - j_{sa})!}{(j_{ik} + j_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{ik} - j_{sa})!} \cdot \\
 & \frac{(n + j_{sa} - n - s)!}{(n + j_{sa} - n - s)! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{(l_{ik}-1)} \sum_{\substack{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik} \\ (j_{sa}+j_{ik}-D-s)}} \\
 & \sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_s+1) \\ (n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}} \sum_{\substack{(\quad) \\ (n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}} \\
 & \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!} \cdot \\
 & \frac{1}{(n - s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

$$D \geq n < n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\sum_{j_{ik}, j_{sa}}^{DOST} \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{j_{sa}^{ik} = l_i + n + j_{sa} - D - s}^{(j_{sa}^{ik} - l)} \sum_{n_{ik} = n - j_{sa}^{ik} + 1}^{(n_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j_{sa}^{ik} + 1}^{(n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(n_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(n_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} + \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_i + j_{sa} - l - s + 1} \sum_{j_{sa} = l_s + j_{sa} - l + 1}$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - j_{sa})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} - l_{sa} - j_{sa})!}{(j_{ik} + j_{sa} - j_{sa} - l_{ik})! \cdot (j^{sa} - j_{sa} - j_{sa})!} \cdot \\
 & \frac{(n - j^{sa} - n - s)!}{(n + j^{sa} - n - s)! \cdot (n - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{\binom{D}{k}} \sum_{\substack{j_{sa}^{ik} \\ j^{sa}=l_i+n+j_{sa}-D-s}}^{l_s+j_{sa}-l} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}}^n \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{(n_i-j_s+1)} \\
 & \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!} \cdot \\
 & \frac{1}{(n - s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

$$D \geq n < n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

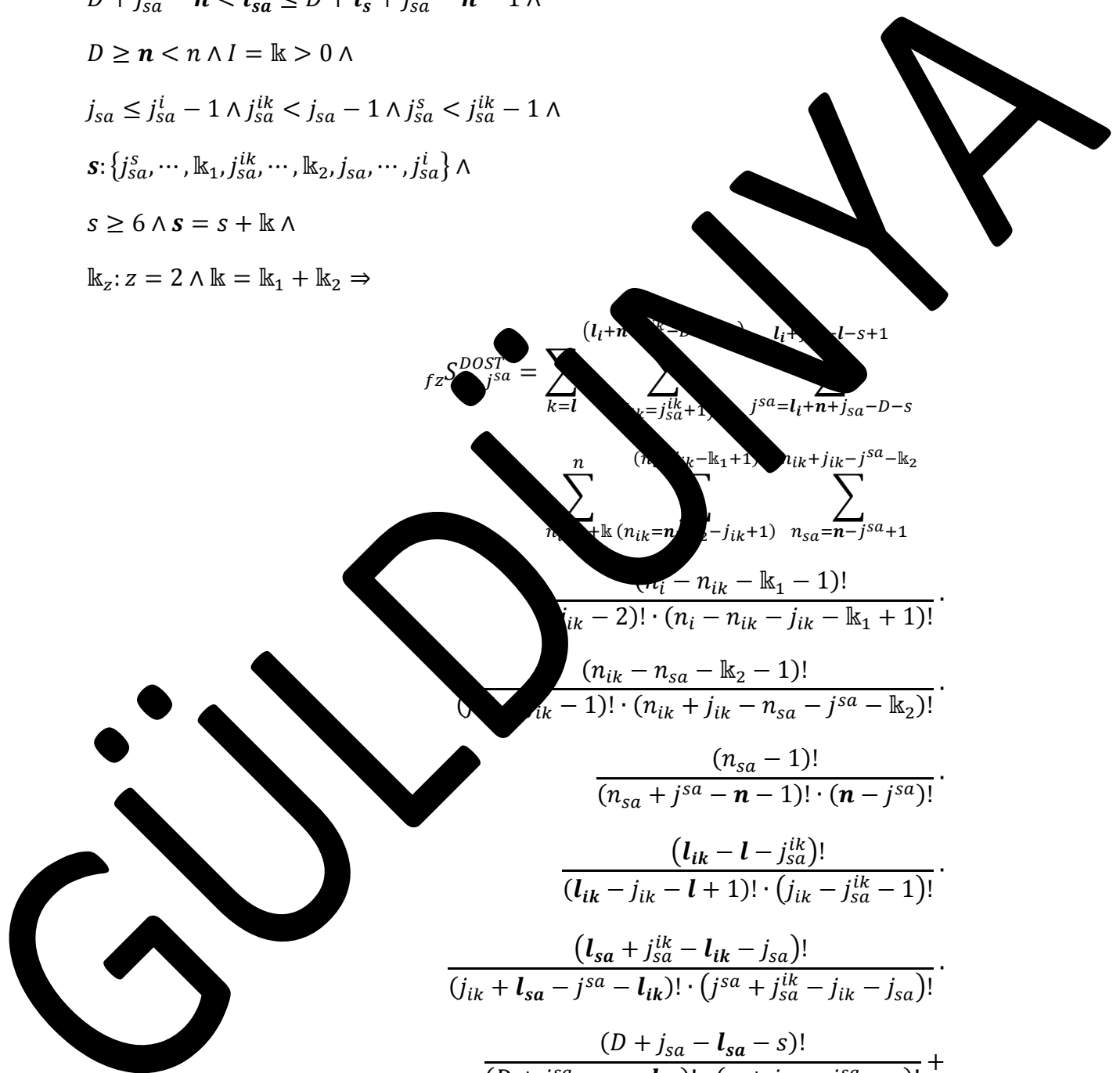
$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz^{SDOST}_{j_{sa}} = \sum_{k=l}^{(l_i+n-j_{sa}^{ik}-D-s)} \sum_{j_{sa}^{ik}=j_{sa}^{ik}+1}^{(l_i+j_{sa}-l-s+1)} \sum_{j_{sa}=l_i+n+j_{sa}-D-s}^{(n-j_{sa}^{ik}-\mathbb{k}_1+1)} \sum_{n_{ik}=n_{ik}-j_{ik}+1}^{(n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(n_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(n_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} + \sum_{k=l}^{(l_s+j_{sa}^{ik}-l)} \sum_{j_{sa}^{ik}=j_{sa}^{ik}-D-s}^{(l_i+j_{sa}-l-s+1)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$





$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - j_{sa})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} - l_{sa} - j_{sa})!}{(j_{ik} + j_{sa} - j_{sa} - l_{ik})! \cdot (j^{sa} - j_{sa}^{ik} - j_{sa})!} \cdot \\
 & \frac{(n + j_{sa} - n - s)!}{(n + j_{sa} - n - s)! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{(l_s+j_{sa}-l)} \sum_{(j_{ik}+j_{sa}-n+j_{sa}^{ik}-D-s)}^{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}}^{( )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \\
 & \frac{(2 \cdot j_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!}{(2 \cdot j_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!} \cdot \\
 & \frac{1}{(n - s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

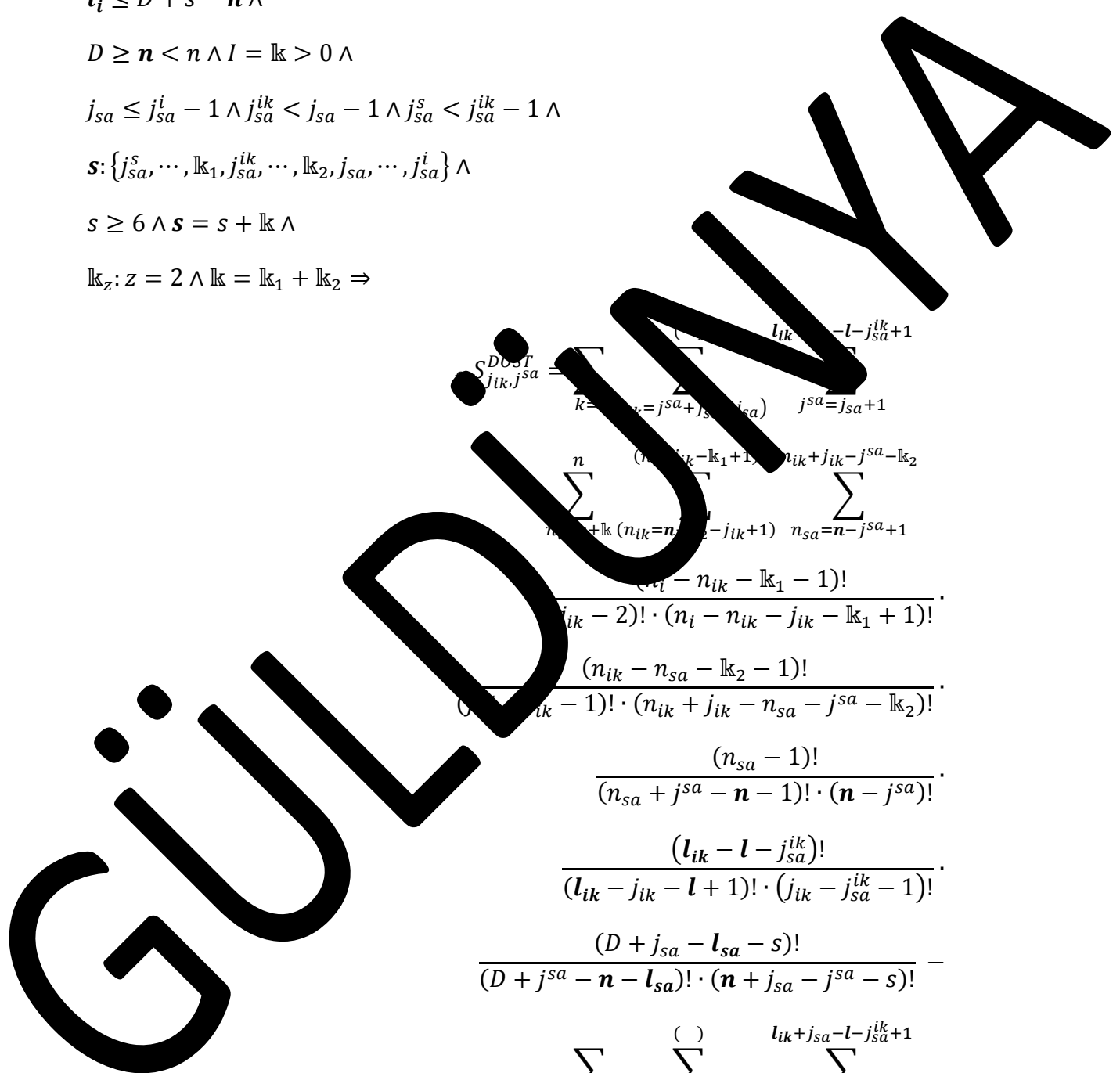
$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\sum_{k=l}^{D+s-I} \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{j_{sa}=j_{sa}+1}^{l_{ik}-l-j_{sa}^{ik}+1} \frac{(n_{ik}-j_{sa}^{ik}+1) \cdot (n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}{\sum_{n_{sa}=n-j_{sa}+1}^{n_{sa}+\mathbb{k} (n_{ik}=n_{sa}+j_{sa}^{ik}-j_{ik}+1)} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(i_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(i_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{j_{sa}=j_{sa}+1}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$



$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{lk}-\mathbb{k}_1} \sum_{\binom{()}{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}$$

$$\frac{(n - l)! \cdot (l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - \mathbb{k}_1 - 1)!} \cdot \frac{(D - l)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (j_{sa}^s - j^{sa} - \mathbb{k}_2)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{lk} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} + j_{sa} - s > 0 \wedge$$

$$D + s - n < l_i \leq D + l_{sa} + j_{sa} - n - j_{sa} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{lk} < j_{sa} - 1 \wedge j_{sa}^{ik} < j_{sa}^{lk} - 1$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}^{ik}, \dots, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \dots \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \dots \Rightarrow$$

$$f_z^{S_{j_{ik}, j_{sa}^{DOST}}} = \sum_{k=l} \sum_{\binom{()}{(j_{ik}=j^{sa}+j_{sa}^{lk}-j_{sa})}} \sum_{j^{sa}=j_{sa}+1}^{l_{ik}+j_{sa}-l-j_{sa}^{lk}+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{\binom{()}{(n_i-j_{ik}-\mathbb{k}_1+1)}} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa}^s - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{\binom{D+l-j_{sa}^{ik}-1}{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}^{sa}=l_i+n+l-s}} \sum_{n_i=n+l_k}^{\binom{l_{ik}+j_{sa}^{ik}-l-j_{sa}^{ik}+1}{n_i=n+l_k} \binom{l_{ik}+j_{sa}^{ik}-l-j_{sa}^{ik}+1}{n_i=n+l_k+j_{sa}^{ik}-j_{ik}}} \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - j^{sa} - s - k - 2 \cdot k_1 - 2 \cdot k_2)!}{(2 \cdot n_{is} + 2 \cdot j_{sa}^s - n_{sa} - j^{sa} - n - j_{sa}^{ik} - 2 \cdot k_1 - 2 \cdot k_2)!} \cdot \frac{1}{(n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n \wedge l \neq i \wedge l \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa}^{ik} \wedge$$

$$j_{ik} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=j_{sa}^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}}$$

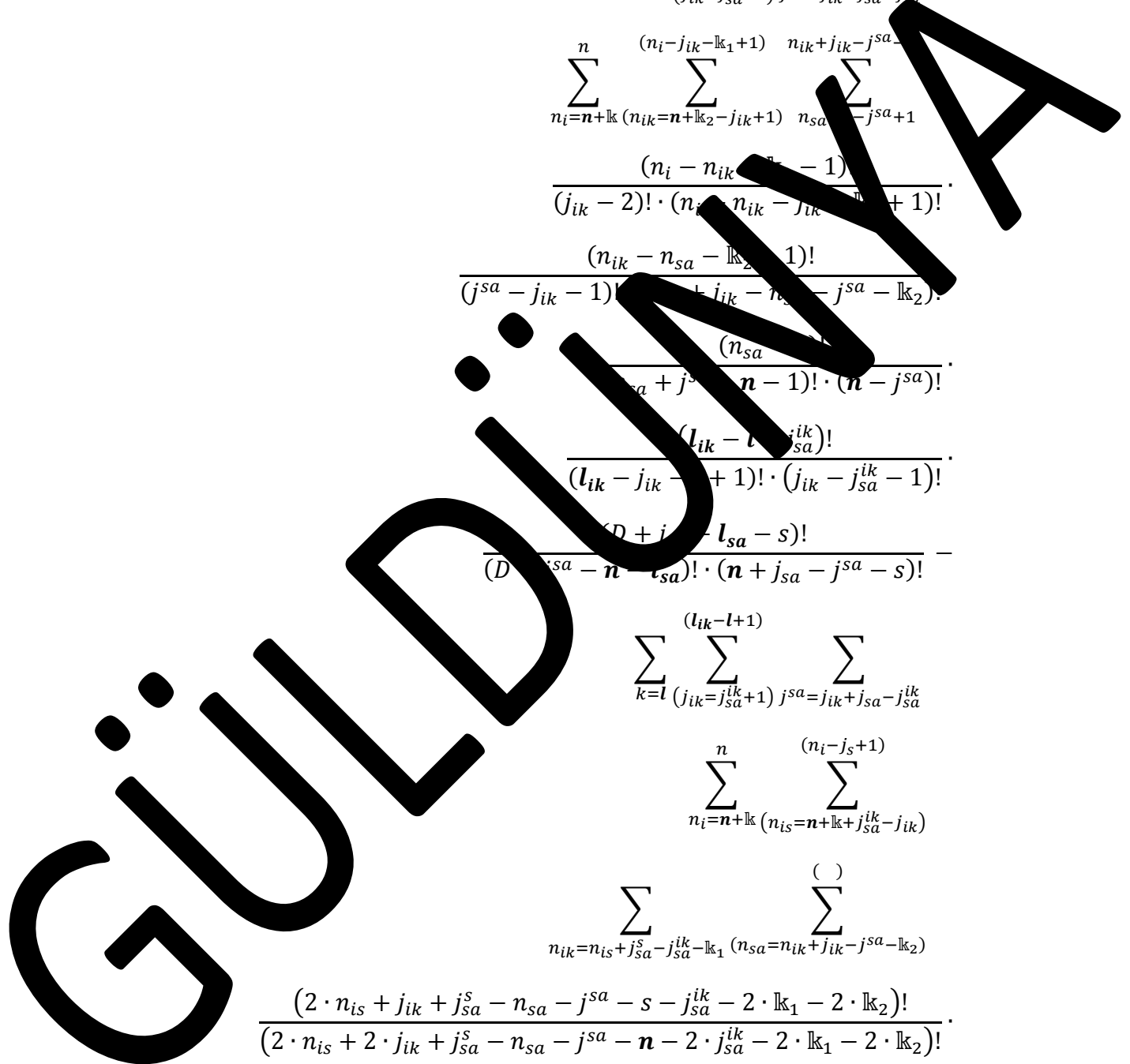
$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l_{sa}^{ik})!}{(l_{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!} \cdot \frac{1}{(n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$



$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$fz \sim j_{sa}^{ST} = \sum_{k=l}^{(l_{ik}-l+1)} \sum_{k=j_{sa}^{ik}+1}^{n} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{n_{ik}+j_{ik}-j^{sa}-k_2} \sum_{n_{sa}=n-j^{sa}+1}^{(n_i-j_{ik}-k_1+1)} \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{n} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{n}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}$$

$$\frac{1}{(s-1)!}$$

$$\frac{(l_s - 1)!}{(l_s + j_{ik} - l)! (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + l_i)!}{(D + l_i + s - n - l_i - j_{sa}^{ik} + 1) \cdot (n + j_{sa} - j^{sa} - s)!}$$

- $D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1$
- $j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$
- $j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$
- $l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_{sa} + j_{sa} - s > l_{sa} \wedge$
- $D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$
- $D \geq n < n - l = \mathbb{k} > 0 \wedge$
- $j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} \leq j_{sa} - 1 \wedge j_{sa}^{ik} \leq j_{sa}^{ik} - 1 \wedge$
- $s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i, \dots, j_{sa}^i\} \wedge$
- $s \geq 6 \wedge s = \mathbb{k}_1 + \mathbb{k}_2 \wedge$
- $\mathbb{k}_1 \wedge \mathbb{k}_2 = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_z S_{j_{ik} j_{sa}^{ik}}^{DOST} = \sum_{k=l}^{(l_{sa}+j_{sa}^{ik}-l-j_{sa}+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa} - 1)!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa})!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{l_i=1}^{(l_{ik}-l+1)} \sum_{j_{sa}^{ik}=D-l_i}^{(j_{sa}^{ik}-D+l_i)} \sum_{j_{sa}^{ik}=j_{sa}^{ik}}^{(n_i-j_s+1)} \sum_{n_{is}=n+l_k}^{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}^{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \frac{(2 \cdot n_{is} + j_{ik} - j_{sa}^{is} - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^{is} - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!} \cdot \frac{1}{(n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$(D \geq n \wedge n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$l_i \leq D + s - n) \vee$$



$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(j^{sa} + j_{sa}^{ik} - j_{sa})} \sum_{(j_{sa}^{ik} + 1)}^{l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1} \sum_{j_{sa} = j_{sa} + 1}^{n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2} \frac{(n_i - j_{sa} - \mathbb{k}_1 + 1) \cdot (n_{sa} - j_{sa} - \mathbb{k}_2)}{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1) \cdot (n_{sa} = n - j_{sa} + 1)} \cdot \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} +$$

$$\begin{aligned}
 & \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_{sa}-l+1} j^{sa=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}^{ik}}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_i + j^{sa} - n - 1)! \cdot (n - j^{sa} - 1)!}{(n_{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{ik} - l_{ik} - j_{sa})!}{(j_{ik} + j_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j^{sa} - l_{sa} - s)!}{(D + j^{sa} - l_{sa} - s)! \cdot (n + j_{sa} - j^{sa} - s)!} \\
 & \sum_{k=l}^{( )} \sum_{(j_{ik}=j_{sa}^{ik}+j_{sa}^{ik}-j_{sa})}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} j^{sa=j_{sa}^{ik}+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}}^{( )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{( )} \\
 & \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!} \cdot \\
 & \frac{1}{(n - s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}
 \end{aligned}$$

GÜLDEN

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\left( (D \geq n < n \wedge l \neq i, l \wedge l_s \leq D - n + 1 \wedge \right.$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l \neq i, l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - j_{sa}^i + 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + 1 \wedge$$

$$\mathbb{k}_1 : z = 2 \wedge \mathbb{k}_1 = \mathbb{k}_1 + 1 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_{sa}-l+1} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}, \dots, j_{sa}=j_{ik}+j_{sa}^{ik}-j_{sa}^{ik})} \sum_{(n_i=j_{sa}^{ik})} \sum_{(n_{i+k}=n+l_k, (n_{i+k}+l_k+j_{sa}^{ik}-j_{ik}))} \sum_{(n_{ik}=n_{is}+j_{sa}^{ik}-l_{k_1}, (n_{ik}+j_{ik}-j^{sa}-l_{k_2}))} \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - l_{k_1} - j^{sa} - s - l_{k_1} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!}{(2 \cdot n_{is} + 2 \cdot j_{sa}^{ik} - n_{sa} - j^{sa} - n - j_{sa}^{ik} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!} \cdot \frac{1}{(n-s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(j_{ik} + j_{sa} - j_{sa}^{ik} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$(D \geq n < n \wedge l \neq l_i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$j_{sa}^{ik} - j_{sa}^{ik} = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq l_i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z^{S_{j_{ik}, j_{sa}^{sa}}} = \sum_{l_i = n + k}^{(j_{sa}^{sa} + k - j_{sa}) l_{ik} + j_{sa}^{sa} - k + 1} \sum_{(j_{sa}^{sa} = j_{sa}^{ik} + 1)} \sum_{n_{sa} = l_{sa} + n - D}^{(n_{ik} - k_1 + 1) \dots (j_{sa} - k_2)} \dots$$

$$\frac{(n_i - n_{ik} - k_1 - 1)!}{(n_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \frac{(n_{sa} - k_2 - 1)!}{(j_{sa} - j_{sa}^{sa} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} +$$

$$\sum_{k=l}^{(l_{ik} - l + 1)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{sa} - l + 1} \sum_{j_{sa} = l_{ik} + j_{sa} - l - j_{sa}^{ik} + 2}^{n_{ik} + j_{ik} - j_{sa} - k_2}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{ik} + j_{ik} - j_{sa} - k_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa} - 1)!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa}^{ik})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (n_{sa} + j_{sa}^{ik} - j_{ik} - l_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - 1)!}{(D + j^{sa} - n - l_{sa})! \cdot (n_{sa} + j_{sa}^{ik} - j^{sa} - s)!} \cdot \sum_{k=l}^{(\cdot)} \sum_{(j_{ik}=j_{sa}^{ik}-j_{sa})}^{(\cdot)} \sum_{(l_{ik}+j_{sa}^{ik})}^{(\cdot)} \sum_{(n_i=n+l_{sa}-D-s)}^{(\cdot)} \sum_{n_i=n+l_{sa}}^n \sum_{(n_{is}=n+l_{sa}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\cdot)} \frac{(2 \cdot n_{is} + j_{ik} + n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!} \cdot \frac{1}{(n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\left( (D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge \right.$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_{z^s}^{ST} = \sum_{k=l}^{(l_{sa}+n+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_{sa}-l+1} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-l+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-k_2}$$

$$\frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\begin{aligned}
 & \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})}^{l_{sa}-l+1} j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}^{ik}}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_i + j^{sa} - n - 1)! \cdot (n - j^{sa} - 1)!}{(n_i - j_{ik} - l_{k_1} + 1)! \cdot (j_{ik} - l_{sa} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{ik} - l_{ik} - j_{sa})!}{(j_{ik} + j_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - l_{sa} - s)! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(l_{ik}-l+1)} j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}}^{(\quad)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{(\quad)} \\
 & \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!} \cdot \\
 & \frac{1}{(n - s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}
 \end{aligned}$$

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$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\left( (D \geq n < n \wedge l \neq i, l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l \neq i, l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$l_{sa} \leq D + j_{sa} - n \wedge l_i \leq D + s - n))$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - j_{sa}^i + 1 \wedge j_{sa}^i < j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k}_z = \mathbb{k}_1 + 1 \Rightarrow$$

$$f_z^{SDOST} j_{ik} j_{sa} = \sum_{k=l}^{(j^{sa} + j_{sa}^{ik} - j_{sa})} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1} \sum_{j^{sa} = j_{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}$$

$$\sum_{n_i = n + \mathbb{k}_1}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\begin{aligned}
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_{sa}+1} \sum_{(j_{sa}=j_{sa}^{ik}+2)}^{l_{sa}+1} \\
 & \sum_{n_i=n+l_{ik}}^n \sum_{(n_{ik}=n_i+l_{ik}-j_{ik}+1)}^{(n_i-j_{ik}+1)} \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-l_{k_2})} \\
 & \frac{(n_{ik}-j_{ik}-l_{k_1}+1)!}{(j_{ik}-l_{k_1}-1)! \cdot (n_{ik}-n_{ik}-j_{ik}-l_{k_1}+1)!} \cdot \\
 & \frac{(n_{ik}-n_{sa}-l_{k_2}-1)!}{(j^{sa}-l_{k_2}-1)! \cdot (n_{ik}-j_{ik}-n_{sa}-j^{sa}-l_{k_2})!} \cdot \\
 & \frac{(n_{sa}-1)!}{(j^{sa}-n-1)! \cdot (n-j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{( )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{( )} \sum_{j^{sa}=j_{sa}+1}^{l_s+j_{sa}-l} \\
 & \sum_{n_i=n+l_{ik}}^n \sum_{(n_{is}=n+l_{ik}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}-l_{k_1}}^{( )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{( )}
 \end{aligned}$$

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$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!} \cdot \frac{1}{(n-s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_{sa} \leq D + j_{sa} - n \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^{ik}, \dots, j_{sa}\}$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_{z,j_{ik},j^{sa}}^{SDO} = \left( \sum_{k=l} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(j_{sa}^{ik}+j_{sa}-l-j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{sa}+1} \right)$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\begin{aligned}
 & \left( \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \\
 & \left( \sum_{k=l}^{(j^{sa} + j_{sa}^{ik} - j_{sa} - 1)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)} \sum_{j^{sa} = j_{sa} + 2}^{l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1} \right. \\
 & \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \\
 & \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l_{sa}^{ik})!}{(l_{ik} - j_{ik} - l_{sa}^{ik} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{ik} - j_{sa}^{ik} + j_{ik} - l_{sa}^{ik} - 1)!}{(j_{ik} + l_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \\
 & \sum_{k=l}^{(l_{ik} - l + 1)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)} \sum_{j^{sa} = l_{ik} + j_{sa} - l - j_{sa}^{ik} + 2}^{l_{sa} - l + 1} \\
 & \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \\
 & \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}
 \end{aligned}$$

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$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{( )} \sum_{(j_{ik}=j_{sa}^{sa})} \sum_{(j_{sa}^{sa}+1)}^{(s+j_{sa}-l)}$$

$$\sum_{(n+l_k)}^{(n_i-j_s)} \sum_{(n_{is}+l_k+j_{sa}^{ik}-j_{ik})}$$

$$\sum_{(n_{ik}=n_{is}+j_{sa}^{ik}-l_{k_1})} \sum_{(n_{ik}+j_{ik}-j_{sa}-l_{k_2})}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - s - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!}{(2 \cdot n_{is} + 2 \cdot n_{sa} - n_{sa} - j_{sa} - n - j_{sa}^{ik} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!}$$

$$\frac{1}{(n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j_{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l \leq D + j_{sa} - n \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa}^{ik} + 1 \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, \dots, l_{k_2}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
 f_z S_{j_{ik}, j^{sa}}^{DOST} = & \left( \sum_{k=l}^{(\mathbb{l}_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(\mathbb{l}_{ik}-l+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \right. \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
 & \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \\
 & \frac{(\mathbb{l}_{ik} - l - j_{sa}^{ik})!}{(\mathbb{l}_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \\
 & \left. \frac{(D + j_{sa} - \mathbb{l}_{sa} - s)!}{(D + j^{sa} - n - \mathbb{l}_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \\
 & \left( \sum_{k=l}^{(\mathbb{l}_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(\mathbb{l}_{ik}-l+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{(\mathbb{l}_{sa}-l+1)} \right. \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
 & \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \\
 & \frac{(\mathbb{l}_{ik} - l - j_{sa}^{ik})!}{(\mathbb{l}_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \\
 & \left. \frac{(\mathbb{l}_{sa} + j_{sa}^{ik} - \mathbb{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbb{l}_{sa} - j^{sa} - \mathbb{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \right)
 \end{aligned}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n - k - j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^{ik} - j_{sa}^{ik} - k_1}^{(n_{ik} - j_s + 1)} \sum_{(n_{ik} + j_{ik} - j_{sa}^{ik} = n_{is} + j_{sa}^{ik} - j_{sa}^{ik} - k_1 - k_2)}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - j_{sa}^{ik} - 2 \cdot k_1 - 2 \cdot k_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n_{sa} - 2 \cdot j_{sa}^{ik} - 2 \cdot k_1 - 2 \cdot k_2)!} \cdot \frac{1}{(n - s)!}$$

$$\frac{(j_{sa}^{ik} - l - 1)!}{(j_{sa}^{ik} - j_{sa}^{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(j_{sa}^{ik} - l_i)!}{(D + j^{sa} + n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l = l_i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge l_{sa} - j_{sa} - j_{sa}^{ik} > l_{ik} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l \neq l_i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$l_{sa} \leq D + j_{sa} - n \wedge l_i \leq D + s - n)) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_{sa}-l+1} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{l_{sa}-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{(n_{sa}=n-j_{sa}+\mathbb{k}_2)}^{(n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}$$

$$\frac{(n_{ik}-j_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)! \cdot (n_{ik}-j_{ik}-\mathbb{k}_1+1)!}$$

$$\frac{(n_{sa}-n_{sa}-\mathbb{k}_2-1)!}{(j_{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j_{sa}-\mathbb{k}_2)!}$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j_{sa}-n-1)! \cdot (n-j_{sa})!}$$

$$\frac{(l_{ik}-l-j_{sa}^{ik})!}{(l_{ik}-j_{ik}-l+1)! \cdot (j_{ik}-j_{sa}^{ik}-1)!}$$

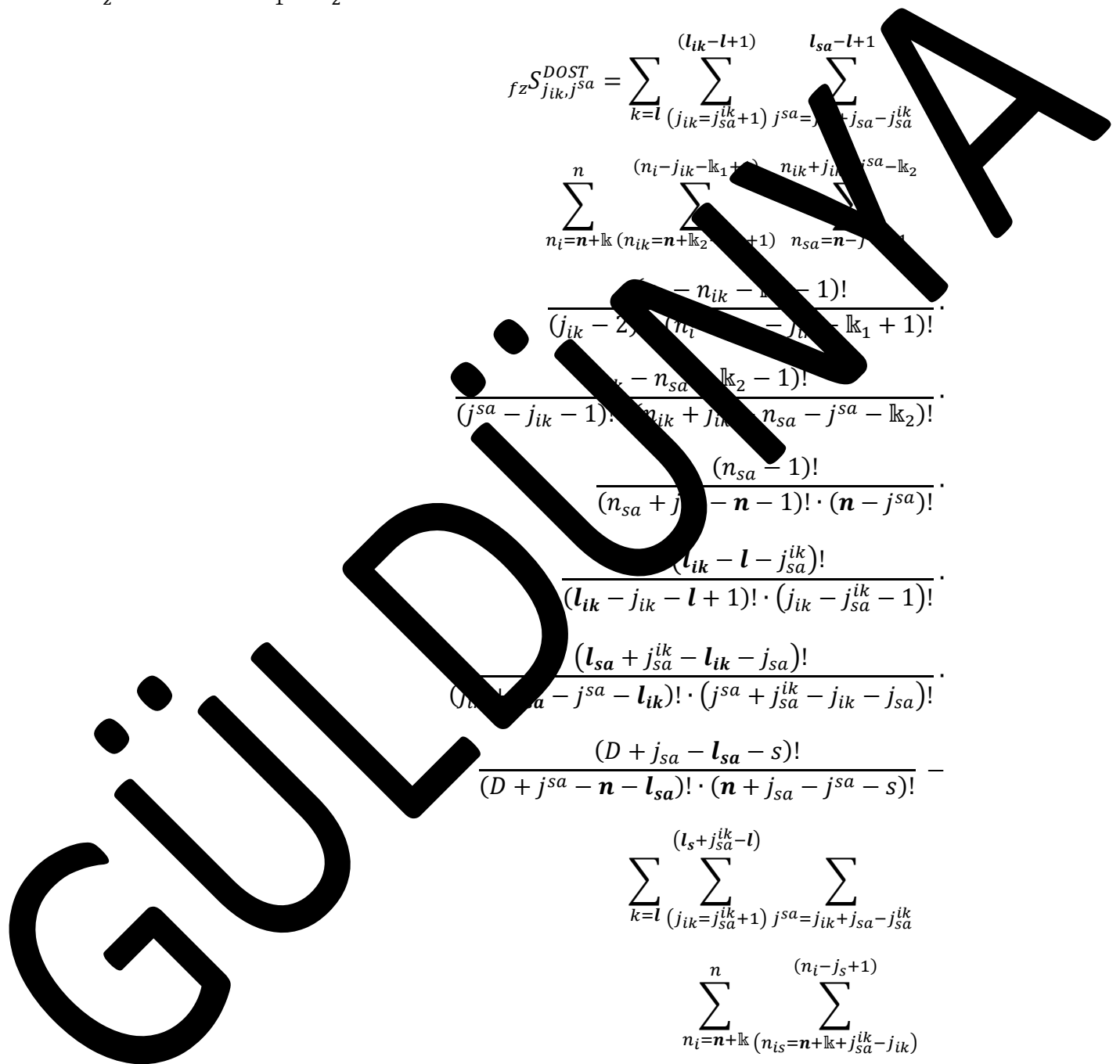
$$\frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(l_{sa}-j_{sa}-j_{sa}^{ik}-l_{ik})! \cdot (j_{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}$$

$$\frac{(D+j_{sa}-l_{sa}-s)!}{(D+j_{sa}-n-l_{sa})! \cdot (n+j_{sa}-j_{sa}-s)!}$$

$$\sum_{k=l}^{(l_s+j_{sa}^{ik}-l)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_{sa}-l+1} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}$$





$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!} \cdot \frac{1}{(n-s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - l)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 0 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_2 \cdot z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2$$

$$f_{z} S_{j_{ik}, j_{sa}}^{DOST} = \left( \sum_{k=l} \sum_{\binom{()}{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}} \sum_{\binom{()}{j^{sa}=l_{sa}+n-D}} \sum_{\binom{()}{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}} \right) \sum_{n_i=n+\mathbb{k}}^n \sum_{\binom{()}{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{\binom{()}{n_{sa}=n-j^{sa}+1}}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\begin{aligned}
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \left( \sum_{k=l}^{(j^{sa} + j_{sa}^{ik} - j_{sa} - 1)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1} \sum_{j_{sa} = l_{sa} - n - D}^{n - D} \right) \cdot \\
 & \sum_{n_i = n + \mathbb{k}_1}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 - 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \\
 & \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{k=l}^{(l_{ik} - l + 1)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{sa} - l + 1} \sum_{j_{sa} = l_{sa} + j_{sa} - l - j_{sa}^{ik} + 2}^{l_{sa} - l + 1} \\
 & \sum_{n_i = n + \mathbb{k}_1}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \\
 & \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
 \end{aligned}$$

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$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik})!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - l_{sa} - j_{sa})!} \cdot \frac{\binom{D + j_{sa} - l_{sa} - s}{(D + j^{sa} - n - l_{sa})! \cdot \binom{n + j_{sa} - j^{sa} - 1}{s}}}{\sum_{j_{ik}=j^{sa}}^{\binom{n}{j_{ik}+j_{sa}}} \binom{l_s+j_{sa}-l}{j_{ik}-j_{sa}} \binom{n_i-j_s+1}{n+l} \sum_{n_{is}=n+l}^{\binom{n}{n+l}} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}^{\binom{n}{n_{sa}}} \binom{n_{is}+j_{sa}^{ik}-j_{sa}-\mathbb{k}_1}{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}} \cdot \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^{ik} - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^{ik} - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!} \cdot \frac{1}{(n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$n \geq n_{is} \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

$$2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z^{DOST} S_{j_{ik} j_{sa}} = \left( \sum_{k=l} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik})}^{(l_{ik}-l+1)} \sum_{(j_{sa}=j_{ik}+j_{sa}^{ik})} \sum_{n=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{(n_{sa}=n-j_{sa}+1)}^{(n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)} \right. \\ \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \\ \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \right) + \\ \left( \sum_{k=l} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(l_{sa}+n+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{j_{sa}=l_{sa}+n-D}^{l_{sa}-l+1} \sum_{n=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{(n_{sa}=n-j_{sa}+1)}^{(n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)} \right) \\ \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!}$$

$$\begin{aligned}
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})}^{(j_{ik}-l)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(j_{ik}-l)} \cdot \\
 & \sum_{n_i=n}^n \sum_{(n_{ik}=n+l_{ik}+j_{ik}+1)}^{(n_{ik}-j_{sa}-l_{k_2})} \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{sa}-j_{sa}-l_{k_2})} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j_{ik} - 2)! \cdot (n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) - \\
 & \sum_{k=l}^{(l_s+j_{sa}^{ik}-l)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(l_s+j_{sa}^{ik}-l)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{(l_s+j_{sa}^{ik}-l)} \cdot \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}
 \end{aligned}$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{lk}-\mathbb{k}_1} \sum_{\binom{()}{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}$$

$$\frac{\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - \mathbb{k}_1 - 1)!}}{(D - l)!} \cdot \frac{(n - l)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n_{sa} + j_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{lk} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{lk} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{lk} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} + j_{sa} - s = l_s \wedge$$

$$D + j_{sa}^{lk} - n < l_{ik} \leq D + l_{sa} - j_{sa}^{lk} - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{lk} < j_{sa} - 1 \wedge j_{sa}^{lk} < j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}^{ik}, \dots, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + 1 \Rightarrow$$

$$f_z^{S_{j_{ik}, j_{sa}^{DOSt}}} = \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_{ik}+n-D)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{lk}}$$

$$\sum_{n_{ik}=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{j_{ik}=l_{ik} + n_{ik} - j_{sa}^{ik}}^{j_{sa}^{ik} - l} \sum_{j_{sa}^{ik}=j_{ik} - j_{sa}^{ik}}^{j_{sa}^{ik} - l} \sum_{n_i=n+l_k}^{(n_i - j_{sa}^{ik} - l)} \sum_{n_{i_1}=n+l_k}^{(n_{i_1} + l_k + j_{sa}^{ik} - j_{ik})} \sum_{n_{i_2}=n+l_k}^{(n_{i_2} + l_k + j_{sa}^{ik} - j_{ik})} \sum_{n_{ik}=n_{is} + j_{sa}^{ik} - l_{k_1}}^{j_{sa}^{ik} - l_{k_1}} \sum_{n_{i_2}=n_{ik} + j_{ik} - j^{sa} - l_{k_2}}^{j_{sa}^{ik} - l_{k_2}} \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - j_{sa} - s - l_{k_1} - 2 \cdot l_{k_2})!}{(2 \cdot n_{is} + 2 \cdot j_{sa}^{ik} - n_{sa} - j_{sa} - n - j_{sa}^{ik} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!} \cdot \frac{1}{(n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n \wedge l \neq i \wedge l \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa}^{ik} \wedge$$

$$j_{ik} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, \dots, l_{k_2}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$s \geq 6 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_z S_{j_{ik}, j^{sa}}^{DOST} = \sum_{k=l} \sum_{\binom{()}{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_i+j_{sa}-l-s+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{\binom{(n_i-j_{ik}-\mathbb{k}_1+1)}{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}} \sum_{n_{sa}=j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l_{sa}^{ik})!}{(l_{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l} \sum_{\binom{()}{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}} \sum_{j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}^{l_s+j_{sa}-l}$$

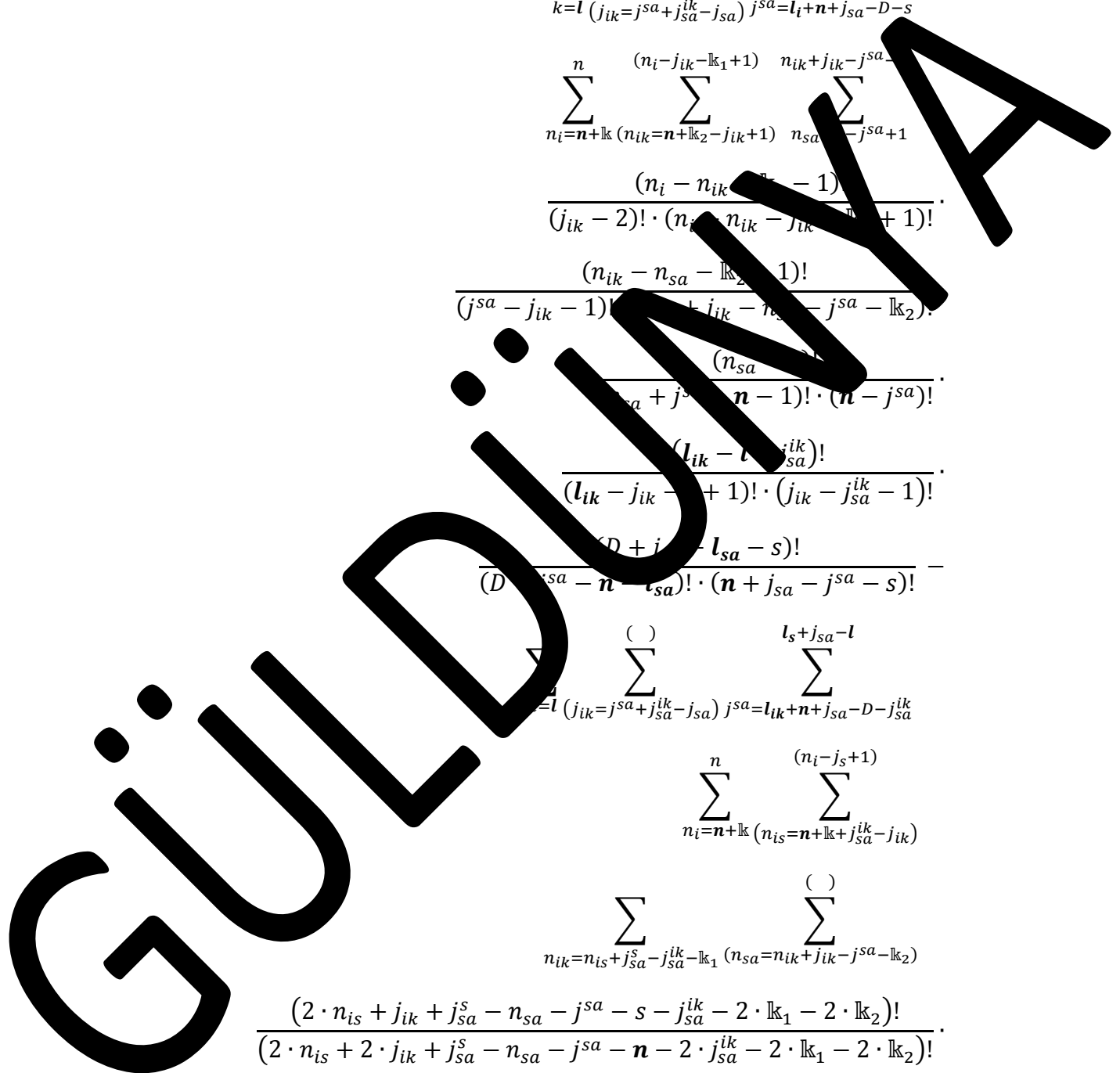
$$\sum_{n_i=n+\mathbb{k}}^n \sum_{\binom{(n_i-j_s+1)}{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{\binom{()}{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}$$

$$\frac{1}{(n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$





$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$\begin{aligned} & \sum_{k=l}^{(l_i + j_{sa}^{ik} - s + 1)} \sum_{j_{sa}^{ik} = j_{ik} + j_{sa} - j_{sa}^{ik}}^{j_{sa}^{ik} - D - s} \sum_{j_{sa}^{ik} = j_{ik} + j_{sa} - j_{sa}^{ik}}^{j_{sa}^{ik} - D - s} \\ & \sum_{i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik} + j_{ik} - j_{sa} - k_2} \\ & \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \\ & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\ & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\ & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\ & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\ & \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_{ik} + n - D)} \sum_{j_{sa}^{ik} = j_{ik} + j_{sa} - j_{sa}^{ik}} \end{aligned}$$

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$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}$$

$$\frac{1}{(s)!}$$

$$\frac{(l_s - 1)!}{(l_s + j_{ik} - l)! (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + l_i)!}{(D + j_{sa} + s - l_i - j_{sa}^{ik} + 1) (n + j_{sa} - j^{sa} - s)!}$$

- $D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1$
- $j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$
- $j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$
- $l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_{sa} + j_{sa} - s = l_{sa} \wedge$
- $D + j_{sa} - n < l_s \leq D + l_s + j_{sa} - n - 1 \wedge$
- $D \geq n < n = \mathbb{k} > 1 \wedge$
- $j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} \leq j_{sa} - 1 \wedge j_{sa}^{ik} \leq j_{sa}^{ik} - 1 \wedge$
- $s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i, \dots, j_{sa}^i\} \wedge$
- $s \geq 6 \wedge s = \dots + \mathbb{k} \wedge$
- $\mathbb{k} = \dots \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz S_{j_{ik} j_{sa}}^{DOST} = \sum_{k=l}^{(j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(j_{ik}=l_{ik}+n-D)} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\begin{aligned}
 & \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{(l_{ik} - l - j_{sa}^{ik})} \sum_{j_{ik}=j_{sa}^{ik} + n - D}^{l_i + j_{sa}^{ik} - 1} \sum_{j^{sa}=j_{sa}^{ik} - j_{ik} + 2}^{l_i + j_{sa}^{ik} - 1} \\
 & \sum_{n_i=n+l_{sa}+j_{sa}^{ik}+j_{sa}-j_{ik}+1}^n \sum_{n_{sa}=n-j^{sa}+1}^{(n_i - j_{ik} - \mathbb{k}_1 + 1) \cdot (n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \\
 & \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{( )} \sum_{(j_{ik}=j_{sa}^{ik} + j_{sa}^{ik} - j_{sa})}^{( )} \sum_{j^{sa}=l_{sa}+n-D}^{l_s + j_{sa} - l}
 \end{aligned}$$

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$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{()}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}$$

$$\frac{1}{(s)!}$$

$$\frac{(l_s - 1)!}{(l_s + j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + l_i)!}{(D + j_{sa} + s - l_i - j_{sa}^{ik} + l_i - j_{sa}^{ik} + (n + j_{sa} - j^{sa} - s)!}$$

- $D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1$
- $j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$
- $j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$
- $l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_{sa} + j_{sa} - s = l_{sa} \wedge$
- $D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$
- $D \geq n < n = \mathbb{k} > 1 \wedge$
- $j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} \leq j_{sa} - 1 \wedge j_{sa}^{ik} \leq j_{sa}^{ik} - 1 \wedge$
- $s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i, \dots, j_{sa}^i\} \wedge$
- $s \geq 6 \wedge s = \dots + \mathbb{k} \wedge$
- $\mathbb{k} = \dots \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_i+n+j_{sa}^{ik}-D-s-1)} \sum_{(j_{ik}=l_{ik}+n-D)} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_i+j_{sa}-l-s+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \sum_{k=l}^{l_{ik}-1} \sum_{j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa}}^{l_{ik}-k} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{l_{ik}-k-s+1} \sum_{n_i=n+\mathbb{k}_1+l_{sa}+l_{ik}+\mathbb{k}_2-j_{ik}+1}^n \sum_{n_{sa}=n-j^{sa}+1}^{(n_i-j_{ik}-\mathbb{k}_1+1) \cdot (n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \sum_{k=l}^{(l_s+j_{sa}^{ik}-l)} \sum_{j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa}}^{l_{ik}-k} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

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$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{sa}-\mathbb{k}_2)}^{()}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}$$

$$\frac{1}{(s)!}$$

$$\frac{(l_s - 1)!}{(l_s + j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + l_i)!}{(D + s - l_i - j_{sa}^{sa} + l_i - j_{sa}^{sa}) \cdot (n + j_{sa} - j^{sa} - s)!}$$

$((D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1) \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_{sa} + j_{sa} - s > l_{sa} \wedge$

$l_i \leq D + s - n) \wedge$

$((D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1) \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$

$l_{ik} \leq D + s - n \wedge l_i \leq D + s - n)) \wedge$

$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$\begin{aligned}
 f_{j_{ik}, j_{sa}}^{DOST} &= \sum_{k=l}^{\binom{()}{}} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})} \sum_{j_{sa}=j_{sa}+1}^{l_{sa}-l+1} \\
 &\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}}^{n_{ik}+j_{ik}-j_{sa}-l_{k_2}} \\
 &\frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
 &\frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j_{sa} - l_{k_2})!} \cdot \\
 &\frac{(\dots - 1)!}{(n_i + j_{sa} - n - 1)! \cdot (n - j_{sa} - 1)!} \cdot \\
 &\frac{(\dots - 1)!}{(n_i - j_{ik} - l_{k_1} + 1)! \cdot (j_{ik} - j_{sa} - 1)!} \cdot \\
 &\frac{(D - l_{sa} - l_{sa} - s)!}{(D - j_{sa} - n - l_{sa} - 1)! \cdot (n + j_{sa} - j_{sa} - s)!} \cdot \\
 &\sum_{k=l}^{\binom{()}{}} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})} \sum_{j_{sa}=j_{sa}+1}^{l_s+j_{sa}-l} \\
 &\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 &\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-l_{k_2})}^{\binom{()}{}} \\
 &\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - s - j_{sa}^{ik} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!} \cdot \\
 &\frac{1}{(n - s)!} \cdot \\
 &\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 &\frac{(D - l_i)!}{(D + j_{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}
 \end{aligned}$$

GÜLDÜZMAYA

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_{sa} + s - n - j_{sa} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

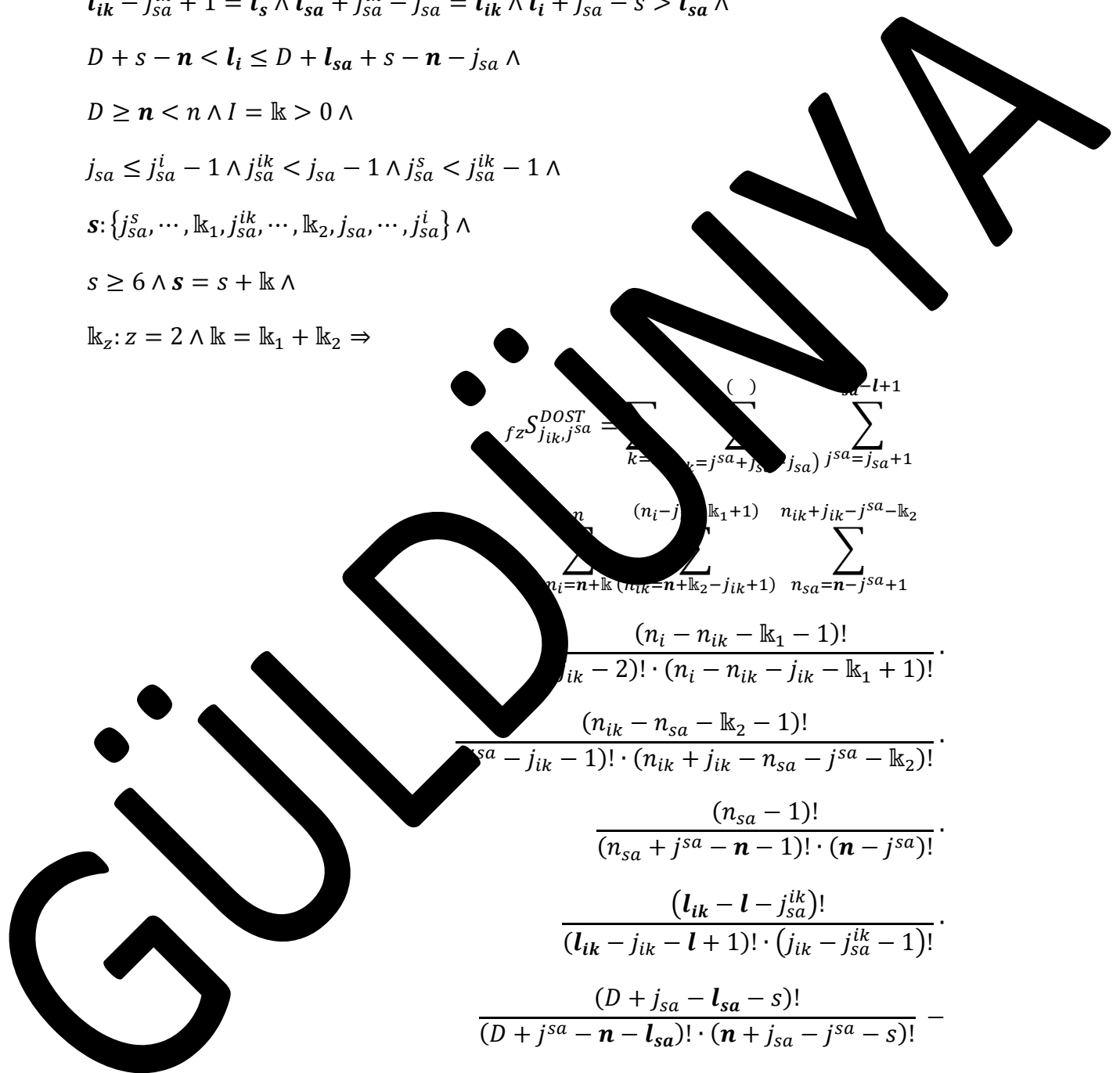
$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{( )} \sum_{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}^{( )} \sum_{j_{sa}=j_{sa}+1}^{( )} \sum_{n_i=n+k}^{(n_i-j_{sa}^{ik}+k_1+1)} \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{ik}+j_{ik}-j_{sa}-k_2} \sum_{n_{sa}=n-j_{sa}+1}^{(n_i-n_{ik}-k_1-1)!} \frac{(n_i-n_{ik}-k_1-1)!}{(j_{ik}-2)! \cdot (n_i-n_{ik}-j_{ik}-k_1+1)!} \cdot \frac{(n_{ik}-n_{sa}-k_2-1)!}{(j_{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j_{sa}-k_2)!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j_{sa}-n-1)! \cdot (n-j_{sa})!} \cdot \frac{(l_{ik}-l-j_{sa}^{ik})!}{(l_{ik}-j_{ik}-l+1)! \cdot (j_{ik}-j_{sa}^{ik}-1)!} \cdot \frac{(D+j_{sa}-l_{sa}-s)!}{(D+j_{sa}-n-l_{sa})! \cdot (n+j_{sa}-j_{sa}-s)!} \sum_{k=l} \sum_{( )}^{( )} \sum_{j_{sa}=l_i+n+j_{sa}-D-s}^{l_s+j_{sa}-l}$$





$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}$$

$$\frac{1}{(n-s)!}$$

$$\frac{(l_s - 1)!}{(l_s + j_{ik} - l)!} \frac{(l_{ik} - j_{sa}^{ik} - 1)!}{(D + l_i)!}$$

$$\frac{(D + j_{sa}^s + s - 1 - l_i - j_{sa}^{ik})!}{(n + j_{sa}^s - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1) \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n - j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D + j_{ik} - n < l_{ik} \wedge (D + l_s + j_{sa}^{ik} - n - 1) \wedge$$

$$(D \geq n < n) \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n - j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{ik} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
 f_z S_{j_{ik}, j_{sa}}^{DOST} = & \sum_{k=l}^{(l_{sa} + j_{sa}^{ik} - l - j_{sa} + 1)} \sum_{(j_{ik} = l_{sa} + n + j_{sa}^{ik} - D - j_{sa})} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}} \\
 & \sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j_{sa}}^{n_{ik} + j_{ik} - j_{sa} - k_2} \\
 & \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!} \cdot \\
 & \frac{(n - j_{sa} - 1)!}{(n_i + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \\
 & \frac{(j_{ik} - j_{sa} - 1)!}{(j_{ik} - j_{sa} - 1)! \cdot (j_{ik} - j_{sa} - 1)!} \cdot \\
 & \frac{(D - j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa} - s)! \cdot (n + j_{sa} - j_{sa} - s)!} \cdot \\
 & \sum_{k=l}^{(l_s + j_{sa} - l)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}} \\
 & \sum_{n_i = n + k}^n \sum_{(n_{is} = n + k + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)} \\
 & \sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - k_1}^{(\quad)} \sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - k_2)}^{(\quad)} \\
 & \frac{(n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - s - j_{sa}^{ik} - 2 \cdot k_1 - 2 \cdot k_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot k_1 - 2 \cdot k_2)!} \cdot \\
 & \frac{1}{(n - s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}
 \end{aligned}$$

$$\left( (D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge \right.$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D + s - n < l_i \leq D + l_{sa} + s - n - j_{sa}) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s - l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}^i, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$fz S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(j^{sa} + j_{sa}^{ik} - j_{sa})} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_s + j_{sa} - l} \sum_{j^{sa} = l_{sa} + n - D}^{n} \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{(n_{sa} = n - j^{sa} + 1)}^{n_{ik} + j_{ik} - j^{sa} - k_2} \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\begin{aligned}
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{j_{sa} = l_s + j_{sa}^{ik} - l + 1}^{j_{sa}^{ik} - l + 1} \cdot \\
 & \sum_{n_i = n + k}^n \sum_{n_{ik} = j_{ik} + 1}^{(n_i - j_{ik} - 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{ik} + j_{ik} - j_{sa} - k_2} \cdot \\
 & \frac{(n_{ik} - j_{ik} - k_1)!}{(j_{ik} - k_1)! \cdot (n_{ik} - j_{ik} - k_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - j_{ik} - k_2)!}{(j^{sa} - k_2 - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{(\quad)} \sum_{(j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa})}^{l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1} \sum_{j^{sa} = l_i + n + j_{sa} - D - s} \cdot \\
 & \sum_{n_i = n + k}^n \sum_{(n_{is} = n + k + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)} \cdot \\
 & \sum_{n_{ik} = n_{is} + j_{sa}^{ik} - j_{sa} - k_1}^{(\quad)} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - k_2)}^{(\quad)} \cdot
 \end{aligned}$$

GÜLDENWA

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!} \cdot \frac{1}{(n-s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - l)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D + s - n < l_i \leq D + l_{sa} + s - n - j_{sa})$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - (l - 1)) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 6 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^i, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = \mathbb{k} + \mathbb{k} \wedge$$

$$\mathbb{k}_2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z^{S_{j_{ik}, j_{sa}^{DOST}}} = \sum_{k=l}^{(l_{sa} + n + j_{sa}^{ik} - D - j_{sa} - 1)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{sa} - l + 1} \sum_{j^{sa} = l_{sa} + n - D}$$

$$\begin{aligned}
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{\substack{(n_i-j_{ik}-\mathbb{k}_1+1) \\ (n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}} \sum_{\substack{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2 \\ n_{sa}=n-j^{sa}+1}} \\
 & \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{l=1}^{(l_s + j_{sa}^{ik})} \sum_{\substack{j_{sa}^{ik} \\ (j_{sa}^{ik} + j_{sa} - D - j_{sa})}} \sum_{\substack{l_{sa}-l+1 \\ j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{\substack{(n_i-j_{ik}-\mathbb{k}_1+1) \\ (n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}} \sum_{\substack{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2 \\ n_{sa}=n-j^{sa}+1}} \\
 & \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -
 \end{aligned}$$

GÜLDENSKY A

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(l_{ik}-l+1)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-l_{k_2})}^{(n_i-j_s+1)} \sum_{(n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1})}^{(\quad)} \sum_{(n_{sa}=n_{ik}+j_{sa}-l_{k_2})}^{(\quad)} \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!} \cdot \frac{1}{(n-s)!} \cdot \frac{(l_s + j_{sa}^{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}{(D - l_i)!} \cdot \frac{1}{(D + j_{sa} + s - n - l_i - j_{sa}^{ik})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l \neq l \wedge l \leq D - n + 1) \vee$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq l \wedge l \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D + s - n < l_i \leq D + l_{sa} + s - n - j_{sa}) \vee$$

$$(D \geq n < n \wedge l \neq l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$\sum_{i=0}^{(j_{sa}^{ik} - j_{sa})} \sum_{k=l_{ik}+n-D}^{(j_{sa}^{ik} - j_{sa})} \sum_{j_{sa}=l_{sa}+n-D}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-k_2}$$

$$\frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$



$$\begin{aligned}
 & \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_{ik}+n-D)}^{l_{sa}-l+1} j^{sa=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}^{ik}}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_i + j^{sa} - n - 1)! \cdot (n - j^{sa} - 1)!}{(n_i - j_{ik} - l_{k_1} + 1)! \cdot (j_{ik} - j^{sa} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{ik} - l_{ik} - j_{sa})!}{(j_{ik} + j_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j^{sa} - l_{sa} - s)!}{(D + j^{sa} - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{( )} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})}^{l_s+j_{sa}-l} j^{sa=l_i+n+j_{sa}-D-s} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}}^{( )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{( )} \\
 & \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!} \cdot \\
 & \frac{1}{(n - s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
 \end{aligned}$$

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$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\left( (D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D + s - n < l_i \leq D + l_{sa} + s - n - j_{sa})$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$D - n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik} j^{sa}}^{DOST} = \sum_{k=l}^{(l_{sa}+n+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{(j_{ik}=l_{ik}+n-D)}^{l_{sa}-l+1} \sum_{j^{sa}=l_{sa}+n-D}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})}^{l_{sa}-l+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

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$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)} j_{sa} = j_{sa} + j_{sa} - j_{sa}^{ik}$$

$$\sum_{n, n+k}^n \sum_{(n_{is} = n_{is} + 1)} (n_{is} + 1) j_{ik}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^{ik} - k_1}^{( )} \sum_{(n_{ik} = n_{is} + j_{sa} - k_2)}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa} - n_{sa} - j_{sa} - s - j_{sa} - 2 \cdot k_1 - 2 \cdot k_2)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa} - n_{sa} - j_{sa} - 2 \cdot j_{sa} - 2 \cdot k_1 - 2 \cdot k_2)!}$$

$$\frac{1}{(n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j_{sa} - s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$(D \geq n < n \wedge l \neq l_i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa}^{ik} - n \leq l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1) \vee$$

$$(D < n < n \wedge l \neq l_i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1 \wedge$$

$$D + s - n < l_i \leq D + l_{sa} + s - n - j_{sa}) \vee$$

$$(D \geq n < n \wedge l \neq l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$\sum_{j_{ik}=l}^n \sum_{j_{sa}^{ik}=j_{sa}-j_{sa}}^{(j_{sa}^{ik})} \sum_{j_{sa}^{ik}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-k_2} \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l} \sum_{\binom{()}{j_{ik}=j^{sa}+j_{sa}^{lk}-j_{sa}}} \sum_{l_s+j_{sa}-l}^{j^{sa}=l_i+n+j_{sa}-D-s}$$

$$\sum_{n_i=n+l_k}^n \sum_{\binom{()}{n_{is}=n+l_k+j_{sa}^{lk}-j_{sa}^{ik}}}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}} \sum_{\binom{()}{n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}^{sa}-l_{k_2}}}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot l_{k_1} - 2 \cdot l_{k_2})!} \cdot \frac{1}{(n-s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + l_i - n - l_i - j) \cdot (n + j_{sa} - j^{sa} - s)!}$$

$D \geq n < n \wedge l = l_i \wedge l_{sa} = D + j_{sa} - n$

$j_{sa}^{lk} \leq j_{ik} \leq j^{sa} + j_{sa}^{lk} - j_{sa} - 1$

$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_i - j_{sa}^{ik} + 1 \leq l_s \wedge l_{sa} = j_{sa}^{ik} - j_{sa} \geq l_{ik} \wedge$

$D > n < n \wedge l = l_i = 0 \wedge$

$j_{sa} \leq j_{sa} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \dots, l_{k_1}, \dots, j_{sa}^{ik}, \dots, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 0 \wedge s \leq s + l_k \wedge$

$l_{k_z}: z = 2, \dots, k = l_{k_1} + l_{k_2} \Rightarrow$

$$f_z S_{j_{ik}, j^{sa}}^{DOST} = \left( \sum_{k=l} \sum_{\binom{()}{j_{ik}=j_{sa}^{lk}}} \sum_{j^{sa}=j_{sa}} \right)$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \left( \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - j_{sa} - s)!} + \right. \\
 & \left. \frac{\sum_{l=0}^{l_{sa}-i^{l+1}} \binom{l_{sa}-i^{l+1}}{l} \sum_{j_{sa}=j_{sa}+1}^{j_{sa}} \binom{j_{sa}}{j_{sa}}}{\binom{l_{sa}-i^{l+1}}{l} \binom{j_{sa}}{j_{sa}}} \right) \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \left. \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} - j_{sa})!} \cdot \right) - \\
 & \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) - \\
 & \sum_{k=1}^n \sum_{l=0}^{\binom{()}{l}} \sum_{j_{sa}=j_{sa}}^{j_{sa}}
 \end{aligned}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n_i-j_{ik}-l_{k_1}+1)}^{\binom{()}{l}} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2}}^{j_{sa}}$$

$$\frac{(2 \cdot n_i + j_{sa}^{ik} - n_{sa} - j_{ik} - j^{sa} - s - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2 + j_{sa}^s)!}{(2 \cdot n_i - n_{sa} - j^{sa} - n - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2 + j_{sa}^s)! \cdot (n - s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l = {}_i l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge l_i \leq D + s - n \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned} f_{z^s} S_{j_{sa}}^{ST} &= \sum_{k=0}^{\binom{()}{i}} \sum_{l_{sa}=j_{sa}}^{l_{sa}-i+1} \\ &\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \\ &\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\ &\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\ &\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\ &\frac{(l_{ik} - {}_i l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - {}_i l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\ &\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \end{aligned}$$



$$\sum_{k=1}^n \sum_{i|j_{ik}=j_{sa}^{ik}}^{( )} \sum_{j_{sa}=j_{sa}}^{( )}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{ik}=n_i-j_{ik}-k_1+1)}^{( )} \sum_{n_{sa}=n_{ik}+j_{ik}-j_{sa}}^{( )}$$

$$\frac{(2 \cdot n_i + j_{sa}^{ik} - n_{sa} - j_{ik} - j^{sa} - s - 2 \cdot k_1 - 2 \cdot k_2 + j_{sa}^i)!}{(2 \cdot n_i - n_{sa} - j^{sa} - n - 2 \cdot k_1 - 2 \cdot k_2 + j_{sa}^i) \cdot (n - s)!}$$

$$\frac{(D - l_i)}{(D + s - l_i) \cdot (n - s)!}$$

$$D \geq n < n \wedge l = i|l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}^i, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_2: z \geq 2 \wedge k = k_1 \wedge k_2 \Rightarrow$$

$$fz S_{j_{ik} j_{sa}}^{DOST} = \sum_{k=1}^n \sum_{i|j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}^{( )} \sum_{j_{sa}=j_{sa}}^{l_{sa}-i|l+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-k_2}$$

$$\frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - i l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!}$$

$$\sum_{k=i}^{( )} \sum_{l}^{( )} \sum_{j_{sa}=j_{sa}^{ik}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n_i-j_{ik}-l_{k_1}+1)}^{( )} \sum_{n_{sa}=n-l_{k_2}}^{( )}$$

$$\frac{(2 \cdot n_i + j_{sa}^{ik} - n_{sa} - j_{ik} - j_{sa} - s - 2 - 2 \cdot l_{k_2} + j_{sa})!}{(2 \cdot n_i - n_{sa} - j_{sa} - n - 2 - 2 \cdot l_{k_2} + j_{sa})! \cdot (n - s)!}$$

$$(D + j_{sa} - n - l_i)! \cdot (n - s)!$$

$$D \geq n < n \wedge l = i l \wedge l_s \leq D - n + 1$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n - j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D \geq n < n \wedge l = i l > 0 \wedge$$

$$j_{sa} \leq j_{sa} - j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, \dots, l_{k_2}, j_{sa}^{ik}, j_{sa}^{ik}\} \wedge$$

$$s \geq 6, l_{k_1} = s + l_{k_1} \wedge$$

$$l_{k_2}: z = 2 \wedge l_{k_2} = l_{k_1} + 1 \Rightarrow$$

$$f_z S_{j_{ik} j_{sa}}^{DOST} = \sum_{k=i}^{( )} \sum_{l}^{( )} \sum_{j_{sa}=j_{sa}^{ik}}^{l_{ik}+j_{sa}-i l-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-l_{k_2}}$$

$$\frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - i^l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i^l + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{\substack{j_{ik} \leq i^l \\ n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}}$$

$$\frac{(2 \cdot n_i + j_{sa}^{ik} - n_{sa} - j_{ik} - j^{sa} - s - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2 + j_{sa}^s)!}{(2 \cdot n_i - n_{sa} - j_{ik} - n - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2 + j_{sa}^s)! \cdot (n - s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l = i^l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{sa}^{ik} + j_{sa} - j_{sa} \leq j^{sa} \leq j_{sa}^{ik} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} = l_{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > \mathbb{k}_1 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^i, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s \leq s + \mathbb{k} \wedge$$

$$\mathbb{k}_2: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_Z S_{j_{ik} j_{sa}}^{DOST} = \sum_{k=i^l} \sum_{(j_{ik}=j_{sa}^{ik})}^{(l_{sa}+j_{sa}^{ik}-i^l-j_{sa}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2 - 1)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - i^l - j_{sa}^i)!}{(l_{ik} - j_{ik} - i^l + j_{sa}^i)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(j_{sa}^i - l_{sa} - s)!}{(D + s - n - l_i - s)! \cdot (n - s)!}$$

$$\sum_{k=i}^{( )} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{( )} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}^{( )}$$

$$\frac{(2 \cdot n_i + j_{ik} - n_{sa} - j_{ik} - j^{sa} - s - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2 + j_{sa}^s)!}{(2 \cdot n_i - n_{sa} - j^{sa} - n - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2 + j_{sa}^s)! \cdot (n - s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$D \geq n \wedge n \wedge l = i^l \wedge l \leq D - n + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j_{sa}^i + j_{sa}^{ik} - j_{sa}^i \wedge$

$j_{ik} - j_{sa}^{ik} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + j_{sa}^{ik} > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa}^i = l_{ik} \wedge$

$D > n \wedge l = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i, \dots, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + \mathbb{k} \wedge$

$$l_k: z = 2 \wedge l_k = l_{k_1} + l_{k_2} \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=i}^l \sum_{(j_{ik}=j_{sa}^{ik})}^{(l_{ik}-i+1)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}^{ik}}$$

$$\frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - 1)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} - j_{sa} - 1)! \cdot (n_{sa} - j_{sa})!} \cdot$$

$$\frac{(l_{ik} - 1 - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(D - j_{sa} - l_{sa} - s)!}{(D + i - n - l_{sa})! \cdot (n - s)!} \cdot$$

$$\sum_{k=i}^l \sum_{(j_{ik}=j_{sa}^{ik})}^{(\quad)} \sum_{j_{sa}=j_{sa}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n_i-j_{ik}-l_{k_1}+1)}^{(\quad)} \sum_{n_{sa}=n_{ik}+j_{ik}-j_{sa}-l_{k_2}}$$

$$\frac{(2 \cdot n_i + j_{sa}^{ik} - n_{sa} - j_{ik} - j_{sa} - s - 2 \cdot l_{k_1} - 2 \cdot l_{k_2} + j_{sa}^s)!}{(2 \cdot n_i - n_{sa} - j_{sa} - n - 2 \cdot l_{k_1} - 2 \cdot l_{k_2} + j_{sa}^s)! \cdot (n - s)!} \cdot$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < l \wedge l = i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge l_i \leq D + s - n \wedge$$



$$\left( (D \geq n < n \wedge l = i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l = i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$l_{sa} \leq D + j_{sa} - n \wedge l_i \leq D + s - n) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, i\}$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=i}^{l_{ik}-i} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j_{sa}=j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - i - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=i}^{\binom{()}{l}} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j_{sa}=j_{sa}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n_i-j_{ik}-l_{k_1}+1)}^{\binom{()}{n_{ik}}} \sum_{n_{sa}=n-j_{sa}-l_{k_2}}^{\binom{()}{n_{sa}}}$$

$$\frac{(2 \cdot n_i + j_{sa}^{ik} - n_{sa} - j_{ik} - j_{sa} - s - 2 \cdot l_{k_1} - 2 \cdot l_{k_2} + j_{sa})!}{(2 \cdot n_i - n_{sa} - j_{sa} - n - 2 \cdot l_{k_1} - 2 \cdot l_{k_2} + j_{sa})! \cdot (n - s)!} \cdot \frac{(D + s - n - l_i)!}{(n - s)!}$$

$$D \geq n < n \wedge l = i \wedge l_{sa} \leq D + j_{sa} \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j_{sa} \leq j_{ik} + j_{sa} - s$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge l = i > 0 \wedge$$

$$j_{sa} \leq j_{sa} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, \dots, l_{k_2}, j_{sa}^s, \dots, j_{sa}^s\}$$

$$s \geq 6 \wedge s = s + l_{k_1} \wedge$$

$$l_{k_2}: z = 2 \wedge l_{k_2} = l_{k_1} + 1 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \left( \sum_{k=i}^{\binom{()}{l}} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})}^{\binom{()}{n_{ik}}} \sum_{j_{sa}=j_{sa}}^{l_{ik}+j_{sa}-i-l-j_{sa}^{ik}+1} \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-l_{k_2}} \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \right)$$



$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - i^l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i^l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!}$$

$$\left( \sum_{k=i^l}^{j^{sa} + j_{sa}^{ik} - j_{sa} - 1} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j_{sa}=j_{sa}+1}^{n_{ik} - j_{ik} - j^{sa} - \mathbb{k}_2 + 1} \right)$$

$$\sum_{n_i=n+\mathbb{k}_2}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{n_{ik}-j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{n_{sa}=n-j^{sa}+1}^{n_{sa}-j_{sa}+1}$$

$$\frac{(j_{ik} - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

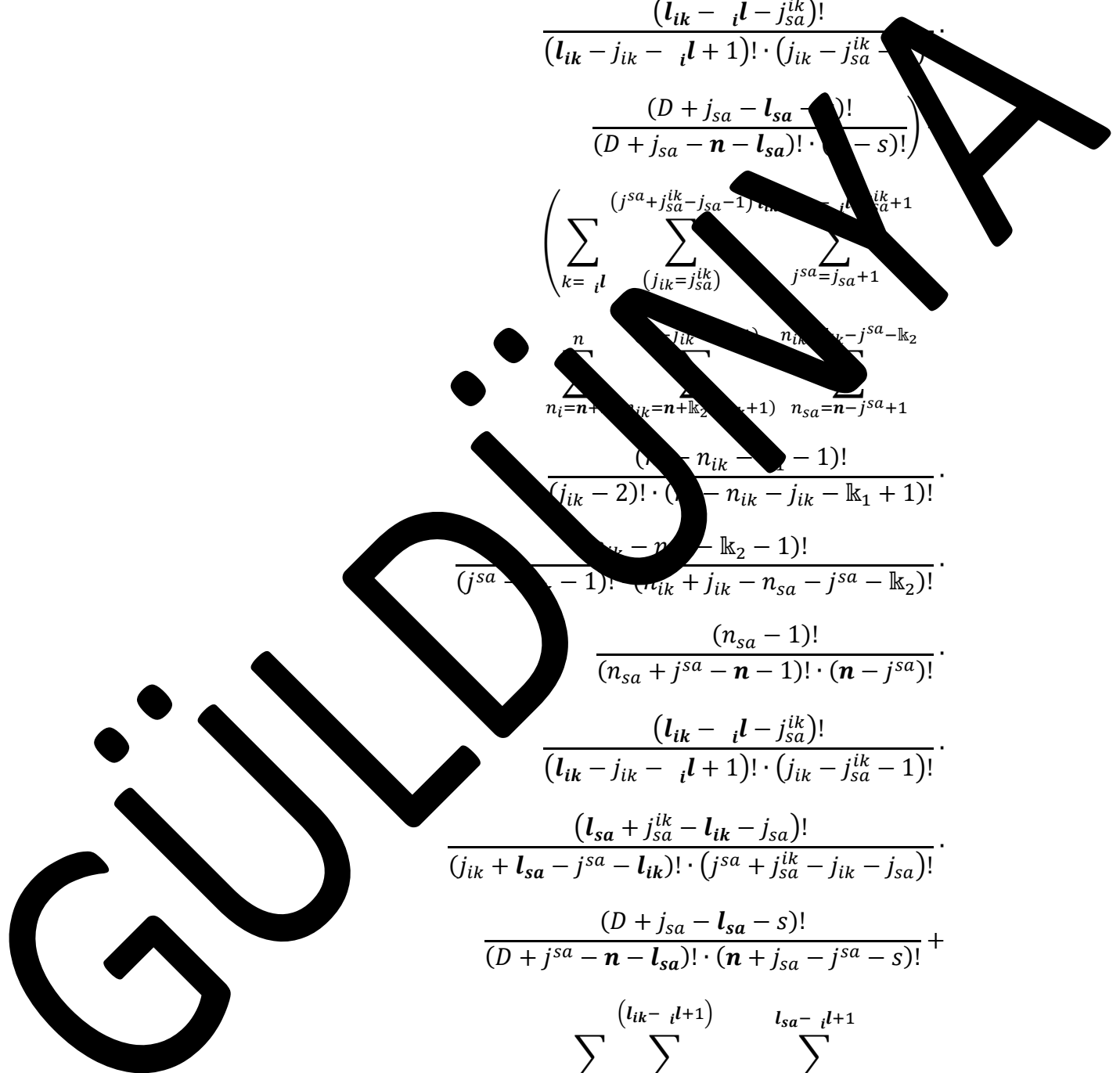
$$\frac{(l_{ik} - i^l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i^l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=i^l}^{(l_{ik}-i^{l+1})} \sum_{(j_{ik}=j_{sa}^{ik})}^{l_{sa}-i^{l+1}} \sum_{j_{sa}=l_{ik}+j_{sa}-i^l-j_{sa}^{ik}+2}$$

$$\sum_{n_i=n+\mathbb{k}_2}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$



$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa} - 1)!} \cdot \frac{(l_{ik} - i^l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i^l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa}^{ik})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - l_{sa})!} \cdot \frac{\binom{D + j^{sa} - l_{sa} - j_{sa}^{ik}}{(D + j^{sa} - n - j_{sa}^{ik})! \cdot (j_{sa} + j_{sa}^{ik} - s)!}}{\sum_{k=1}^n \sum_{j_{ik}=j_{sa}^{ik}} \sum_{j^{sa}=j_{sa}} \binom{(\cdot)}{n_i = n_{ik} + \mathbb{k}_1} \binom{(\cdot)}{n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}}{\binom{(\cdot)}{(2 \cdot n_i - n_{sa} - j_{sa}^{ik} - j_{sa}^{ik} - j^{sa} - s - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2 + j_{sa}^s)!} \cdot \binom{(\cdot)}{(2 \cdot n_i - n_{sa} - j_{sa}^{ik} - j_{sa}^{ik} - j^{sa} - s - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2 + j_{sa}^s)!} \cdot (n - s)!} \cdot \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq \dots < n \wedge l = \dots \wedge l_{sa} \leq D \wedge j_{sa} - n \wedge$$

$$j_{sa}^{ik} \leq j_{ik} - j_{sa}^{ik} + j_{sa}^{ik} - \dots - 1 \wedge$$

$$j_{ik} + \dots - j_{sa}^{ik} + \dots \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + \dots > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$\dots \geq n - \dots \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z \mathcal{S}_{j_{ik}, j^{sa}}^{DOST} = \left( \sum_{k=i}^l \binom{l_{ik} - i^{l+1}}{j_{ik} = j_{sa}^{ik}} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}} \sum_{n_i = n + \mathbb{k}}^n \binom{n_i - j_{ik} - \mathbb{k}_1 + 1}{n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1} \binom{n_{ik} + j_{ik} - j^{sa}}{n_{sa} = n - j^{sa} + 1} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - i^{l+1} - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i^{l+1} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D) j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!} \right) + \left( \sum_{k=i}^l \binom{l_{ik} - i^{l+1}}{j_{ik} = j_{sa}^{ik}} \binom{l_{sa} - i^{l+1}}{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik} + 1} \sum_{n_i = n + \mathbb{k}}^n \binom{n_i - j_{ik} - \mathbb{k}_1 + 1}{n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1} \binom{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}{n_{sa} = n - j^{sa} + 1} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - i^{l+1} - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i^{l+1} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \right)$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -$$

$\sum_{k=i}^l \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{sa}}$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n_i-j_{ik}-l_{k_1}+1)}^{(n_{sa}=n_{ik}-j_{sa}-l_{k_2})}$$

$$\frac{(2 \cdot n_i + j_{sa}^{ik} - n_{sa} - j_{ik} - j^{sa} - s - 2 \cdot l_{k_1} - 2 \cdot l_{k_2} + j_{sa})!}{(2 \cdot n_i - n_{sa} - j^{sa} - n - 2 \cdot l_{k_1} - 2 \cdot l_{k_2} + j_{sa})! \cdot (n - s)!} \cdot \frac{1}{(D + s - n - l_i)! \cdot (n - s)!}$$

- $D \geq n < n \wedge l = i \wedge l_s \leq D - n + s$
- $j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$
- $j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n - j_{sa} - s \wedge$
- $l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_{sa} + j_{sa} - s > l_{sa} \wedge$
- $l_i \leq D + s - n \wedge$
- $D \geq n < n \wedge l = k > i \wedge$
- $j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} \leq j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$
- $s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, \dots, l_{k_2}, j_{sa}, \dots, j_{sa}^i\} \wedge$
- $s \geq 6 \wedge s = i + l_{k_1} \wedge$
- $l_{k_1} = i \wedge l_{k_2} = l_{k_1} + l_{k_2} \Rightarrow$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=i}^l \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!}$$

$$\sum_{n_i=n+\mathbb{k}_1}^n \sum_{j_{ik}=n_i-\mathbb{k}_1}^{n_i} \sum_{n_{sa}=n_{ik}-\mathbb{k}_2}^{n_{ik}} \frac{(2 \cdot n_i + j_{sa}^{ik} - n_{sa} - j_{ik} - j^{sa} - s - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2 + j_{sa}^s)!}{(2 \cdot n_i - n_{sa} - j_{ik} - n - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2 + j_{sa}^s)! \cdot (n - s)!} \cdot \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$(D \geq n < n \wedge l = l_i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} > l_{ik} \wedge$$

$$l_{sa} \leq D - j_{sa} - n \wedge l_i \leq (D + s - n) \vee$$

$$(D \geq n < n \wedge l = l_i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \geq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$l_i \leq (D + s - n) \vee$$

$$(D \geq n < n \wedge l = l_i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n)) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(n_i-j_{ik}-\mathbb{k}_1-1)} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}^{n_{sa}=n-j^{sa}+1} \frac{(n_{sa}-i^{l+})}{fz^{j_{ik}^{sa}}} \sum_{k=i^l}^{(j_{sa}^{ik})} \sum_{j_{sa}^{sa}} \frac{(n_{sa}-i^{l+})}{(j_{sa}^{sa}-j_{sa}^{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-n-1)! \cdot (n-j^{sa})!} \cdot \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(l_{sa}+j_{sa}^{ik}-j^{sa}-l_{ik})! \cdot (j^{sa}-j_{sa})!} \cdot \frac{(D+j_{sa}-l_{sa}-s)!}{(D+j^{sa}-n-l_{sa})! \cdot (n+j_{sa}-j^{sa}-s)!}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(j_{sa}^{ik})} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}^{j_{sa}^{sa}}$$

$$\frac{(2 \cdot n_i + j_{sa}^{ik} - n_{sa} - j_{ik} - j^{sa} - s - 2 \cdot k_1 - 2 \cdot k_2 + j_{sa}^s)!}{(2 \cdot n_i - n_{sa} - j^{sa} - n - 2 \cdot k_1 - 2 \cdot k_2 + j_{sa}^s)! \cdot (n - s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

**GÜLDÜNYA**

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik}) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_{zS} S_{j_{ik}, j_{sa}}^D = \left( \sum_{k=l} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(l_{ik}+j_{sa}-l-j_{sa}^{ik}+1)} \sum_{(j^{sa}=l_{sa}+n-D)} \right.$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \Big)$$



$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\left( \sum_{k=l}^{(j^{sa} + j_{sa}^{ik} - j_{sa} - 1)} \sum_{(j_{ik} = l_{ik} + n - D)} \sum_{j^{sa} = l_{sa} + n - D}^{n_{ik} + j_{ik} - j_{sa}^{ik} + 1} \right)$$

$$\sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa}}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l_{sa} - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - j_{sa}^{ik} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{ik} - j_{sa}^{ik} + j_{sa}^{ik} - l_{sa} - j_{sa}^{ik})!}{(j_{ik} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l}^{(l_{ik} - l + 1)} \sum_{(j_{ik} = l_{ik} + n - D)} \sum_{j^{sa} = l_{sa} - l + 1}^{n_{ik} + j_{ik} - j^{sa} - k_2 + 2}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - k_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \sum_{k=l}^{\binom{)}{l_{ik} + j_{sa}^{ik} - j_{sa}^{ik} + 1}} \sum_{(j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa})}^{(l + n + j_{sa}^{ik} - D - s)} \sum_{(n + k)}^{(n - j_s + 1)} \sum_{(n_{is} + k + j_{sa}^{ik} - j_{ik})} \sum_{(n_{ik} = n_{is} + j_{sa}^{ik} - k_1)}^{(n_{is} + j_{sa}^{ik} - k_1 + j_{ik} - j^{sa} - k_2)} \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^{ik} - n_{sa} - j^{sa} - j_{sa}^{ik} - 2 \cdot k)!}{(2 \cdot n_{is} + 2 \cdot j_{sa}^{ik} + j_{sa}^{ik} - n_{sa} - j^{sa} - n - j_{sa}^{ik} - 2 \cdot k)! \cdot (n - s)!} \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \frac{(D - l_i)!}{(D + j_{sa}^{ik} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 2 \leq l \leq D - n + 1 \wedge j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik}) \vee (D < n \wedge l_s > D - n + 1 \wedge$$

$$D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 2 \leq l \leq D - n + 1 \wedge j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \Big) \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^l\} \wedge$$

$$s \geq 4 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z^{S_{j_{ik} j_{sa}^{DOST}}} = \sum_{k=l}^{(l_{ik}-l+1)} \sum_{j_{sa}=l_{sa}^{l+1}}^{(n-D)} \sum_{n_i=n+k}^n \sum_{n_{is}=n+k+j_{sa}^{ik}-j_{ik}}^{(n_i-k_1+1)} \sum_{j_{sa}^{ik}=j_{sa}+1}^{(n_{is}-j_{ik}+1)} \frac{(n_{ik}-n_{ik}-1)!}{(j_{ik}-2)! \cdot (n_{is}-n_{ik}-j_{ik}+1)!} \cdot \frac{(n_{ik})}{(j_{sa}^{sa}-1)!} \frac{(n_{sa}-1)!}{(n_{ik}+j_{ik}-n_{sa}-j_{sa})!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j_{sa}-n-1)! \cdot (n-j_{sa})!} \cdot \frac{(l_{ik}-l-j_{sa}^{ik})!}{(l_{ik}-j_{ik}-l+1)! \cdot (j_{ik}-j_{sa}^{ik}-1)!} \cdot \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j_{sa}-l_{ik})! \cdot (j_{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot \frac{(D+j_{sa}-l_{sa}-s)!}{(D+j_{sa}-n-l_{sa})! \cdot (n+j_{sa}-j_{sa}-s)!}$$

$$\sum_{k=l} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})} \sum_{j_{sa}=l_i+n+j_{sa}-D-s}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{\binom{()}{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}} \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - l)!} \cdot \frac{(D - l_j)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$((D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \vee$

$(D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \vee$

$D \geq n < n \wedge I = \mathbb{k}_1 + \mathbb{k}_2 \wedge$

$j_{sa}^s \leq j_{sa}^{l-1} \wedge j_{sa}^{ik} = j_{sa}^{l-1} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, j_{sa}^{l-1}, j_{sa}^{ik}, j_{sa}^{l-1} - 1, j_{sa}^s\} \wedge$

$s \geq 4 \wedge s \leq n + \mathbb{k} \wedge$

$z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \left( \sum_{k=l} \sum_{\binom{(l_{ik}-l+1)}{j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa}}} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\begin{aligned}
& \sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_{ik}-l_{k_1}+1) \\ (n_{ik}=n+l_{k_2}-j_{ik}+1)}} \sum_{\substack{n_{ik}+j_{ik}-j^{sa}-l_{k_2} \\ n_{sa}=n-j^{sa}+1}} \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \left( \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j^{sa} - s)!} + \right. \\
& \left. \left( \sum_{k=l}^n \sum_{\substack{(n_i-j_{ik}-l_{k_1}+1) \\ (n_{ik}=n+l_{k_2}-j_{ik}+1)}} \sum_{\substack{n_{ik}+j_{ik}-j^{sa}-l_{k_2} \\ n_{sa}=n-j^{sa}+1}} \right) \right. \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \right)
\end{aligned}$$

$$\begin{aligned}
 & \sum_{k=l} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{lk}-D-j_{sa})}^{(l_{ik}-l+1)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{lk}+1)}^{l_{sa}-l+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} + j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{sa} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_i + j^{sa} - n - 1)! \cdot (n - j^{sa} - 1)!}{(n_i - j_{ik} - l_{k_1} + 1)! \cdot (j_{ik} - l_{k_2} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{ik} - l_{ik} - j_{sa})!}{(j_{ik} + j_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{lk} - j_{ik} - j_{sa})!} \cdot \\
 & \left( \frac{(D + j_{sa} - n_{sa} - s)!}{(D + j_{sa} - n - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) - \\
 & \sum_{k=l} \sum_{(j_{ik}=l_i+n+j_{sa}^{lk}-D-s)}^{(l_{ik}-l+1)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{lk})} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{lk}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{lk}-l_{k_1}}^{(n_{ik}-l+1)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{(n_{sa}-l+1)} \\
 & \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{lk} - 2 \cdot l_k)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{lk} - 2 \cdot l_k)! \cdot (n - s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{lk} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{lk} - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

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$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_{z, j_{ik}, j_{sa}}^{DOST} = \left( \sum_{k=l}^n \binom{n}{j_{ik} + j_{sa}^{ik} - j_{sa} - l} \sum_{j_{sa} = l_{sa} + n - D}^{j_{sa} - l} \binom{n_i - j_{ik} - k_1 + 1}{n_{ik} + j_{ik} - j^{sa} - k_2} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{sa} - n + k_2 - j_{ik} + 1} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \left( \sum_{k=l}^{j^{sa} + j_{sa}^{ik} - j_{sa} - 1} \sum_{j_{sa} = l_{sa} + n - D}^{l_s + j_{sa} - l} \binom{l_s + j_{sa} - l}{j_{sa} = l_{sa} + n - D} \right)$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_{ik}-l_{k_1}+1) \\ (n_{ik}=n+l_{k_2}-j_{ik}+1)}} \sum_{\substack{n_{ik}+j_{ik}-j^{sa}-l_{k_2} \\ n_{sa}=n-j^{sa}+1}} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{k=l}^{(l_s+1)-l} \sum_{\substack{j_{ik}=s+n+j_{sa}^{ik}-D-1 \\ j^{sa}=l_s+j_{sa}-l+1}}^{l_{sa}-l+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_{ik}-l_{k_1}+1) \\ (n_{ik}=n+l_{k_2}-j_{ik}+1)}} \sum_{\substack{n_{ik}+j_{ik}-j^{sa}-l_{k_2} \\ n_{sa}=n-j^{sa}+1}} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +
 \end{aligned}$$

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$$\begin{aligned}
& \sum_{k=l} \sum_{(j_{ik}=l_s+n+j_{sa}^{ik}-D-1)}^{(l_s+j_{sa}^{ik}-l)} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-l+1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} + j_{ik} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} + j^{sa})!} \cdot \\
& \frac{(n - 1)!}{(n_i + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{ik} - j_{ik})!}{(l_{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - 1)!}{(j_{ik} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \left( \frac{(D + j_{sa} - n - s)!}{(D + j_{sa} - n - s)! \cdot (n + j_{sa} - j^{sa} - s)!} \right) - \\
& \sum_{k=l} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{( )} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_s+j_{sa}-l} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{( )} \\
& \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n - s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
\end{aligned}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 2 \leq l \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_{z, j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_s - j_{sa}^{ik} - l)} \sum_{j_{ik}=n+j_{sa}^{ik}-D+1}^{(n - j_{sa}^{ik} - \mathbb{k}_1 + 1)} \sum_{j_{sa}=l_{sa}+n-D}^{(l_{sa} - l + 1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{(n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)} \sum_{n_{sa}=n-j_{sa}+1}^{(n_{sa} - j_{sa} + 1)}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)}^{(l_s + j_{sa}^{ik} - l)} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}} \sum_{n_i = n + k}^n \sum_{(n_{is} = n + k + j_{sa}^{ik} - j_{sa}^{ik})}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - k_1} \sum_{(n_{sa} = n_{ik} + j_{sa}^{ik} - k_2)}^{(\dots)} \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - \dots)}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot k)! \cdot (n_{is} - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - \dots)}{(D + j^{sa} + s - n - \dots - j_{sa}^{ik})! \cdot (j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq l \leq D + l_{ik} + j_{sa} - n - j_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa} + 1 = l_s \wedge l_{ik} + j_{sa}^{ik} - j_{sa} > 0 \wedge$$

$$D \geq n < n \wedge l_s \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa} \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, k_2, j_{sa}, \dots, j_{sa}^{ik}\} \wedge$$

$$s \geq s = s + k_1 \wedge$$

$$k_z: z = 2 \wedge k_z = k_1 + k_2 \Rightarrow$$

$$f_z S_{j_{ik} j^{sa}}^{DOST} = \left( \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_s + n + j_{sa}^{ik} - D - j_{sa})}^{(l_s + j_{sa}^{ik} - l)} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}} \sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{(n_{ik} + j_{ik} - j^{sa} - k_2)} \right)$$

$$\begin{aligned}
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa})!}{(D + j^{sa} - n - l_{sa})! \cdot (D + j_{sa} - j_{sa} - l_{sa})!} + \\
 & \left( \sum_{k=l}^{l_{sa} + j_{sa}^{ik} - D - j_{sa}^{sa}} \sum_{j_{ik}=l_{sa} + n + j_{sa}^{ik} - D - 1}^{l_{sa} - l + 1} \sum_{n=n+lk}^n \sum_{n_{ik}=n - j_{ik} - lk_2}^{n_{ik} + j_{ik} - j^{sa} - lk_2} \sum_{n_{sa}=n - j^{sa} + 1}^{n_{sa} = n - j^{sa} + 1} \right) \cdot \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{j_{ik}=l_{sa} + n + j_{sa}^{ik} - D - j_{sa}}^{l_{sa} - l + 1} \sum_{j^{sa}=j_{ik} + j_{sa} - j_{sa}^{ik} + 1}
 \end{aligned}$$

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$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_{ik}-l_{k_1}+1) \\ (n_{ik}=n+l_{k_2}-j_{ik}+1)}} \sum_{\substack{n_{ik}+j_{ik}-j^{sa}-l_{k_2} \\ n_{sa}=n-j^{sa}+1}} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} + 1)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - j_{sa})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} - l_{sa} - j_{sa})!}{(j_{ik} + j_{sa} - j_{sa} - l_{ik})! \cdot (j^{sa} - j_{sa}^{ik} - j_{sa})!} \cdot \\
 & \left( \frac{(D + j_{sa} - l_{sa} - s)!}{(n + j_{sa} - n - l_s)! \cdot (n + j_{sa} - j^{sa} - s)!} \right) \cdot \\
 & \sum_{k=l}^{(l_s+j_{sa}-l)} \sum_{\substack{j_{sa}^{ik} \\ (j_{ik}-l_i+n+j_{sa}^{ik}-D-s)}} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \\
 & \sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_s+1) \\ (n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}} \sum_{\substack{(\quad) \\ (n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}} \\
 & \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot l_k)!}{(n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot l_k)! \cdot (n - s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 \geq l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{\binom{D+j_{sa}-l_{sa}-s}{j_{ik}+j_{sa}-j_{sa}^{ik}-j_{sa}}} \sum_{\substack{n_i=n+\mathbb{k}_1 \\ n_{ik}=n_{is}+j_{sa}^{ik}-\mathbb{k}_1}}^{\binom{l_{ik}+j_{sa}-l_{sa}-\mathbb{k}_1}{n_{ik}+j_{sa}^{ik}-j_{sa}}} \sum_{\substack{n_{sa}=l_{sa}+n-D \\ n_{sa}=n_{is}+j_{sa}^{ik}-j_{sa}}}^{\binom{l_{sa}+j_{sa}-l_{sa}-\mathbb{k}_2}{n_{sa}+j_{sa}^{ik}-j_{sa}}} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{sa} - n_{sa} - 1)!}{(n_{sa} - j_{sa} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \sum_{k=l}^{\binom{D+j_{sa}-l_{sa}-s}{j_{ik}+j_{sa}-j_{sa}^{ik}-j_{sa}}} \sum_{\substack{n_i=n+\mathbb{k}_1 \\ n_{ik}=n_{is}+j_{sa}^{ik}-\mathbb{k}_1}}^{\binom{l_{sa}+j_{sa}-l_{sa}-\mathbb{k}_1}{n_{ik}+j_{sa}^{ik}-j_{sa}}} \sum_{\substack{n_{sa}=l_{sa}+n-D \\ n_{sa}=n_{is}+j_{sa}^{ik}-j_{sa}}}^{\binom{l_{sa}+j_{sa}-l_{sa}-\mathbb{k}_2}{n_{sa}+j_{sa}^{ik}-j_{sa}}} \frac{(n_i - j_s + 1)!}{\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}} \sum_{\substack{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1 \\ n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}}^{\binom{D+j_{sa}-l_{sa}-s}{j_{ik}+j_{sa}-j_{sa}^{ik}-j_{sa}}} \sum_{\substack{n_{sa}=n_{is}+j_{sa}^{ik}-\mathbb{k}_1 \\ n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}}^{\binom{D+j_{sa}-l_{sa}-s}{j_{ik}+j_{sa}-j_{sa}^{ik}-j_{sa}}}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - \mathbf{n} - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (\mathbf{n} - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - \mathbf{n} - l_i - j_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!}$$

$$D \geq \mathbf{n} < \mathbf{n} \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 \geq l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D \geq \mathbf{n} < \mathbf{n} \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 =$$

$$j_{sa}^{DOST} = \sum_{j_{sa}^{ik}, j_{sa}} \binom{()}{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{j^{sa}=l_{ik}+\mathbf{n}+j_{sa}-D-j_{sa}^{ik}} \binom{l_{sa}-l+1}{j^{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^{\mathbf{n}} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l} \sum_{(j_{ik}=j^{sa}+j_{sa}^{lk}-j_{sa})} \sum_{l_s+j_{sa}-l} j^{sa} = l_i + n + j_{sa} - D - s$$

$$\sum_{n_i=n+l_k} \sum_{(n_{is}=n+l_k+j_{sa}^{lk}-j_{sa})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{lk}-l_{k1}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{lk}-l_{k2})}^{(n_{ik}-l_{k1}+1)}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{lk} - l_{k1})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{lk} - 2 \cdot l_k)! \cdot (n_{is} - s)!}$$

$$\frac{(l_s - l_{k1})!}{(l_s + j_{sa}^{lk} - j_{ik} - l_{k1})! \cdot (j_{ik} - j_{sa}^{lk} - 1)!}$$

$$\frac{(D - l_{k1})!}{(D + j^{sa} + s - n - j_{sa}^{lk} - l_{k1})! \cdot (n_{is} + j_{sa} - j^{sa} - s)!}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$j_{sa}^{lk} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{lk} - j_{sa}^{lk} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{lk} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{lk} + 1 \geq l_{k1} \wedge l_{sa} + j_{sa}^{lk} - j_{sa}^{lk} = l_{ik} \wedge$

$D \geq n < n \wedge I = l_{k1} = 0 \wedge$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{lk} = j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{lk} - 1 \wedge$

$s: \{j_{sa}^{lk_1}, j_{sa}^{lk_2}, j_{sa}^i, j_{sa}^s\} \wedge$

$s \geq 4 \wedge s \leq s + l_k \wedge$

$l_{k_2}: z \geq 2 \wedge l_k = l_{k_2} \Rightarrow$

$$f_z S_{j_{ik}, j^{sa}}^{DOST} = \sum_{k=l} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{lk}-D-j_{sa})}^{(l_{ik}-l+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{lk}} \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}}$$



$$\begin{aligned}
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa} - j_{ik} - 1)!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa})!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
& \sum_{j_{ik}=l_i+1}^{(l_s+j_{sa}^{ik}-l)} \sum_{j_{sa}^{ik}=j_{sa}^{ik}-D-s}^{(n_{sa}-j_{sa}^{ik})} \sum_{j_{sa}^{ik}=n+l_k}^{(n_i-j_s+1)} \sum_{j_{sa}^{ik}=n+l_k+j_{sa}^{ik}-j_{ik}}^{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})} \sum_{j_{sa}^{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}}^{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{j_{sa}^{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}}^{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \\
& \frac{(2 \cdot n_{is} + j_{sa}^s + j_{sa}^{ik} - l_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot l_k)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s + j_{sa}^{ik} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot l_k)! \cdot (n - s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
\end{aligned}$$

$$D \geq n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{sa}^{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 \geq l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D \geq n < n \wedge l = l_k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z S_{j_{ik} j_{sa}}^{DOST} = \sum_{k=l}^{(l_{sa} + j_{sa}^{ik} - l - j_{sa} + 1)} \sum_{(j_{ik} = l_{ik} + n - D)} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik})}^{(n_i - j_{ik} - k_1 + 1)} \sum_{(n_{is} = n + k + j_{sa}^{ik} - j_{ik})}^{(n_{ik} + j_{sa} - j_{sa}^{ik} - k_2)}$$

$$\frac{(n_{is} - 1)!}{(j_{ik} - 2)! \cdot (n_{is} - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - 1)!}{(j_{sa} - k_1 - 1)! \cdot (n_{ik} + j_{ik} - j_{sa})!}$$

$$\frac{(n_{is} - 1)!}{(n_{sa} - n_{is} - n + 1)! \cdot (n - j_{sa})!} \cdot \frac{(n - l - j_{sa}^{ik})!}{(n_{is} - j_{sa}^{ik} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

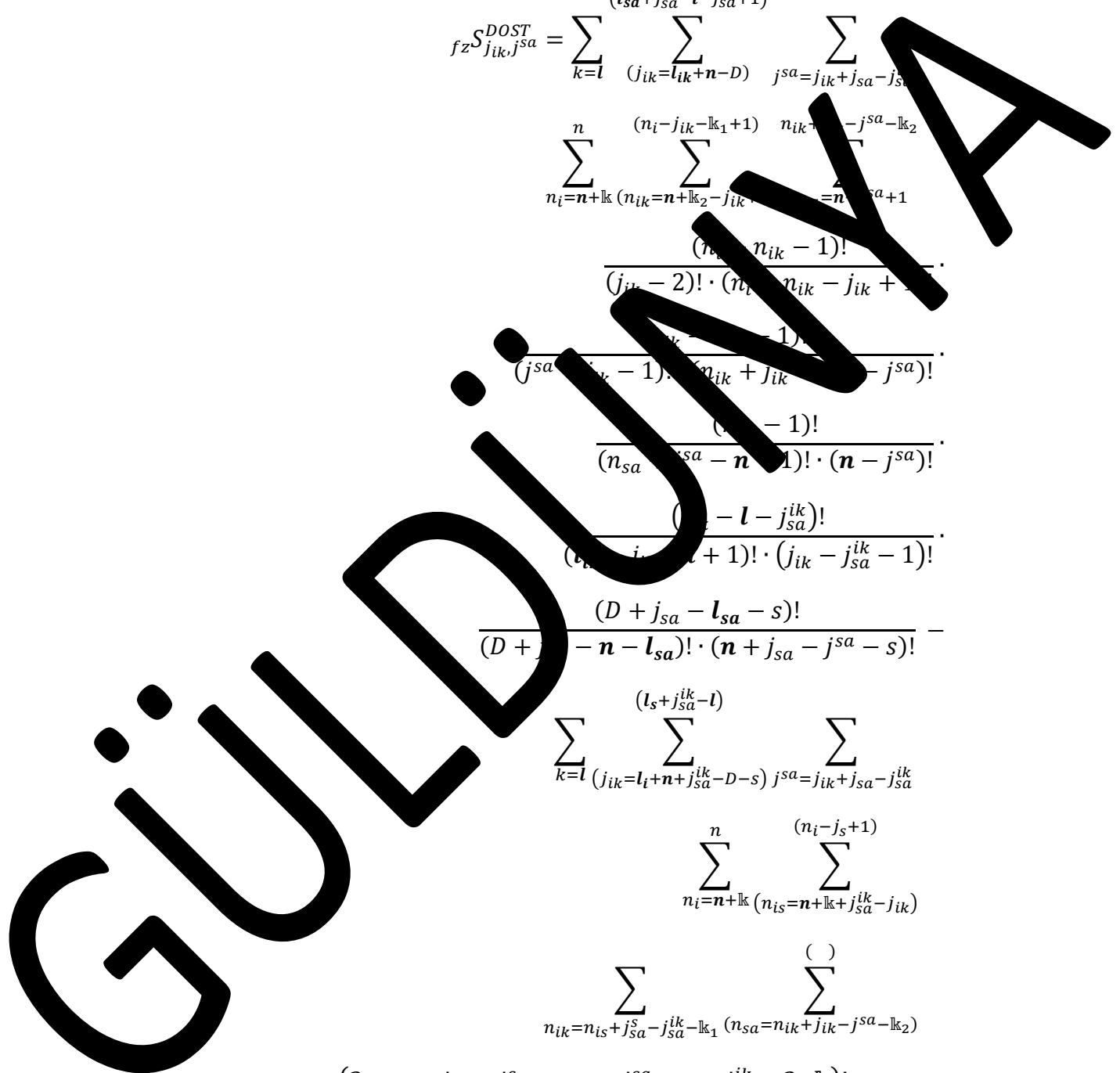
$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - k_1}^{( )} \sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - k_2)}^{( )}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - s - j_{sa}^{ik} - 2 \cdot k)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot k)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$



$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$\begin{aligned} & \sum_{j_{ik}, j_{sa}^{ik}} f_z^{DOS} \sum_{j_{ik}=l_s+n+j_{sa}^{ik}-1}^{(j_{ik}-j_{sa}^{ik}-j_{sa})} \sum_{j_{sa}^{ik}=l_i+n+j_{sa}-D-s}^{l_s+j_{sa}-l} \\ & \sum_{n_i=n+k}^{(n_i-n-k_1+1)} \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{ik}+j_{ik}-j_{sa}-k_2} \sum_{n_{sa}=n-j_{sa}+1} \\ & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\ & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\ & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\ & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\ & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\ & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \end{aligned}$$

$$\sum_{k=l} \sum_{(j_{ik}=l_s+n+j_{sa}^{ik}-D-1)}^{(l_s+j_{sa}^{ik}-l)} \sum_{j_{sa}=l_s+j_{sa}-l+1}^{l_i+j_{sa}-l-s+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}}^{n_{ik}+j_{ik}-j_{sa}-l_{k_2}}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!}$$

$$\frac{(n_i - 1)!}{(n_i + j_{sa} - n - 1)! \cdot (n - j_{sa})!}$$

$$\frac{(l_{ik} - j_{ik})!}{(l_{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - 1)!}{(j_{ik} + j_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})}^{( )} \sum_{j_{sa}=l_{sa}+n-D}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-l_{k_2})}^{( )}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - s - j_{sa}^{ik} - 2 \cdot l_k)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot l_k)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j_{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z^S j_{sa}^{DOST} = \sum_{k=l}^{(l_i+n+1-j^{sa})} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(l_i+j_{sa}-l-s+1)} j^{sa}=l_i+n+j_{sa}-D-s$$

$$\sum_{n_{ik}+k}^n \sum_{(n_{ik}=n_{ik}-j_{ik}+1)}^{(n_{ik}-k-k_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-k_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(n_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l}^{(l_s+j_{sa}^{ik}-l)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{l_i+j_{sa}-l-s+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - 1)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - j_{sa})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} - l_{sa} - j_{sa})!}{(j_{ik} + j_{sa} - j_{sa} - l_{ik})! \cdot (j^{sa} - j_{sa}^{ik} - j_{sa})!} \cdot \\
 & \frac{(n_i + j_{sa} - n - s)!}{(n_i + j_{sa} - n - 1)! \cdot (n_i - j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{l=1}^{(l_{ik}-l)} \sum_{j_{sa}^{ik}=j_{sa}^{ik}-D-j_{sa}}^{j_{sa}^{ik}-D-j_{sa}} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}}^{( )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{( )} \\
 & \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot l_k)!}{(2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot l_k)! \cdot (n - s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

$((D \geq n < n \wedge l_s > D - n + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$j_{ik, j_{sa}}^{ST} = \sum_{k=l} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(l_{sa}-l+1)} j^{sa=l_{sa}+n-D}$$

$$\sum_{n_i=n+k}^n \sum_{(n_i-j_{ik}-k_1+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{(n_{sa}=n-j_{sa}+1)}^{n_{ik}+j_{ik}-j_{sa}-k_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l} \sum_{\binom{()}{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}} \sum_{l_s+j_{sa}-l}^{l_s+j_{sa}-l} j^{sa=l_i+n+j_{sa}-D-s}$$

$$\sum_{n_i=n+l_k}^n \sum_{\binom{(n_i-j_s+1)}{n_i=n+l_k+j_{sa}^{ik}-j_{ik}}}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{sa}^{ik}} \sum_{\binom{()}{n_{sa}=n_{ik}+j_{ik}-l_{k_2}}}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - l_{k_2})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - l_{k_2} - 2 \cdot l_{k_2} + 1) \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa} - j_{ik} - 1) \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(n + j^{sa} + j_{sa} - n - l_i - j_{sa} - s)! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$((D \geq n < n \wedge l_s > D - n + 1 \wedge$   
 $j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$   
 $j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$   
 $l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$   
 $(D \geq n < n \wedge l_s > D - n + 1 \wedge$   
 $j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$   
 $j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$   
 $l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$   
 $(D \geq n < n \wedge l_s > D - n + 1 \wedge$   
 $j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$   
 $j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$   
 $l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \wedge$   
 $D \geq n < n \wedge l = k \geq 0 \wedge$



$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{sa} + j_{sa}^{ik} - l - j_{sa} + 1)} \sum_{(j_{ik} = l_{sa} + n + j_{sa}^{ik} - D - j_{sa})} j_{sa} = j_{sa} - j_{sa}^{ik}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{sa} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1)} \sum_{n_{sa} = n - j_{sa}}^{(n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j_{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - \mathbb{k}_1} \sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)}^{(\quad)}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^s\} \wedge$$

$$s \geq 4 \wedge s = s + k \wedge$$

$$k_z: z \geq 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$j_{ik, j_{sa}}^{ST} = \sum_{k=l} \sum_{\binom{()}{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}} \sum_{\binom{()}{j_{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}} \frac{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}{(j_{ik}-2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(\quad)} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\quad)} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_s+j_{sa}-l}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is} \leq n - j_{ik})}^{(n_i - \mathbb{k} + 1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-\mathbb{k}_2}^{(\quad)} \sum_{j^{sa}=n_{ik}-j^{sa}-\mathbb{k}_2}^{(\quad)}$$

$$\frac{(2 \cdot n_{is} + j_{ik}^s - j_{sa}^s - n_{sa} + j^{sa} - j_{sa}^{ik} - 2 \cdot \mathbb{k}_j)}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - 2 \cdot j_{sa}^s - 2 \cdot \mathbb{k}_j)! \cdot (n - s)!}$$

$$\frac{(j_{ik} - j_{sa}^{ik} - l - 1)!}{(j_{ik} - j_{sa}^{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + \dots - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l_s = D - n + 1 \wedge$$

$$j_{ik}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_{ik}+n-D)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=j_{sa}-j_{sa}^{ik}+1}^{n_{ik}+j_{ik}-j_{sa}}$$

$$\frac{(n_i - 1)!}{(j_{ik} - 2)! (n_i - n_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(j_{sa} + j_{ik} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik}=l_i + n + j_{sa}^{ik} - D - s)} \sum_{j_{sa}=j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j_{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz^{DOS} j_{ik,j_{sa}} = \sum_{k=l}^{j_{sa}^{ik}-j_{sa}} \sum_{(j_{ik}=l_{ik}+n-D)}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{n_{ik}+j_{sa}-l-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_{ik}+n-D)}^{l_i+j_{sa}-l-s+1} \sum_{j^{sa}=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_s=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} + j_{sa} - n - 1)!}{(n_{sa} - j^{sa})!} \cdot$$

$$\frac{(l_{ik} - j_{sa} - j^{sa})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + j_{sa} - j^{sa} - j_{sa}^{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=l}^{( )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{l_s+j_{sa}-l} \sum_{j^{sa}=l_{sa}+n-D}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}}^{( )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot l_k)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot l_k)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

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$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$\sum_{k=l}^{(l_i+n+j_{sa}^{ik}-D-s-1)} \sum_{(j_{ik}=l_{ik}+n-D)} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_i+j_{sa}-l-s+1} f_z^S j_{ik}^{ST} \sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-k_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} +$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{l_i+j_{sa}-l-s+1} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_k-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{(n_{sa}=n_{ik}+j_{sa}-j_{sa}^{ik}-l_{k_2})}^{n_{ik}+j_{sa}-j_{sa}^{ik}-l_{k_2}}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(j_{sa} - 1)! \cdot (n_{sa} - 1)!}{(j_{sa} - 1)! \cdot (n_{sa} - 1)! \cdot (j_{ik} + j_{sa} - n_{sa} - j_{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} -$$

$$\sum_{k=l}^{(l_s+j_{sa}^{ik}-l)} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})}^{(l_s+j_{sa}^{ik}-l)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-l_{k_2})}^{( )}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - s - j_{sa}^{ik} - 2 \cdot l_k)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot l_k)! \cdot (n - s)!}$$

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$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa})) \wedge$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa} \leq j_{sa}^i \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$\{j_{sa}^s, \mathbb{k}_1, j_{sa}^i, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
 f_{j_{ik}, j^{sa}}^{DOST} = & \sum_{k=l}^{(j^{sa} + j_{sa}^{ik} - j_{sa})} \sum_{(j_{ik} = l_{ik} + n - D)} \sum_{j^{sa} = l_{sa} + n - D}^{l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1} \\
 & \sum_{n_i = n + l_k}^n \sum_{(n_{ik} = n + l_{k_2} - j_{ik} + 1)}^{(n_i - j_{ik} - l_{k_1} + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - l_{k_2}} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}{(j_{ik} + j_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - l_{sa} - s)! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{k=l}^{(l_{ik} - l + 1)} \sum_{(j_{ik} = l_{ik} + n - D)}^{l_{sa} - l + 1} \sum_{j^{sa} = l_{ik} + j_{sa} - l - j_{sa}^{ik} + 2} \\
 & \sum_{n_i = n + l_k}^n \sum_{(n_{ik} = n + l_{k_2} - j_{ik} + 1)}^{(n_i - j_{ik} - l_{k_1} + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - l_{k_2}} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
 \end{aligned}$$

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$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(\quad)} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\quad)} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_s+j_{sa}-l}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_i+l_k-j_{ik})}^{(n_i+l_k+1)}$$

$$\sum_{n_{ik}=n_i+j_{sa}^{ik}-l_{ik}}^{(\quad)} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{(\quad)}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - j_{sa}^{ik} - 2 \cdot l_k)}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - 2 \cdot j_{sa}^{ik} - 2 \cdot l_k)! \cdot (n - s)!}$$

$$\frac{(j_{ik} + j_{sa} - j^{sa} - l - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}{(D - l_i)!}$$

$$(D + j^{sa} + \dots - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge j_{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge l_{ik} - j_{sa} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge l_{ik} - j_{sa} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_{z_{sa}^{POST}} = \sum_{k=l}^{n+j_{sa}^{ik}-j_{sa}-1} \sum_{j_{ik}=k+n-D}^{l_{sa}-l+1} \sum_{j^{sa}=l_{sa}+n-D}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\begin{aligned}
 & \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})}^{(l_{sa}-l+1)} j_{sa}^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}^{sa}}^{n_{ik}+j_{ik}-j_{sa}^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} + j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{sa} - n_{sa} - j_{sa}^{sa})!} \cdot \\
 & \frac{(n_i + j_{sa} - n - 1)!}{(n_i + j_{sa} - n - 1)! \cdot (n - j_{sa}^{sa} - 1)!} \cdot \\
 & \frac{(l_{ik} - j_{sa}^{sa} - 1)!}{(n_i - j_{ik} - l_{k_1} + 1)! \cdot (j_{ik} - j_{sa}^{sa} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{sa} - l_{ik} - j_{sa}^{sa})!}{(j_{ik} + j_{sa}^{sa} - j_{sa} - l_{ik})! \cdot (j_{sa}^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa}^{sa} - l_{sa} - s)!}{(D + j_{sa}^{sa} - l_{sa} - s)! \cdot (n + j_{sa} - j_{sa}^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{(l_s+j_{sa}^{ik}-l)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(l_s+j_{sa}^{ik}-l)} j_{sa}^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^{sa}-j_{sa}^{ik}-l_{k_1}}^{( )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{sa}-l_{k_2})}^{( )} \\
 & \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j_{sa}^{sa} - s - j_{sa}^{ik} - 2 \cdot l_k)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j_{sa}^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot l_k)! \cdot (n - s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_{sa}^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa}^{sa} - s)!}
 \end{aligned}$$

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$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$fzS_{k,j_{sa}}^{DOS1} = \sum_{k=l}^n \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})}^{(j_{ik}=n-k_1+1)} \sum_{(j_{sa}=l_s+n+j_{sa}-D-1)}^{(j_{sa}=l_{sa}-l)} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(n_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \sum_{k=l}^n \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})}^{( )} \sum_{(j_{sa}=l_i+n+j_{sa}-D-s)}^{(l_{sa}-l+1)} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{\binom{()}{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}} \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - l)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j^s < j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^{ik}\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned} j_{ik, j_{sa}}^{OST} &= \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik}=l_s + n + j_{sa}^{ik} - D - 1)} \sum_{j^{sa}=j_{ik} + j_{sa} - j_{sa}^{ik}} \\ &\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\ &\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \end{aligned}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{(l_{sa} + j_{sa}^{ik} - l - j_{sa} + 1)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)} \sum_{j_{sa} = j_{sa} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n: n+k}^n \sum_{(n_{is} = n_{is} + 1)} \sum_{(j_{ik})}$$

$$\sum_{(n_{ik} = n_{is} + j_{sa}^{ik} - k_1 - k_2)} \sum_{(n_{ik} = j_{sa} - k_2)}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - s - j_{sa}^{ik} - 2 \cdot k)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - s - j_{sa}^{ik} - 2 \cdot k)! \cdot (n - s)!} \cdot \frac{(n - l - 1)!}{(n + j_{sa} - j_{sa} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j_{sa} + n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$j_{ik} + 1 \leq j_{ik} < j_{sa} + j_{sa} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - j_{sa} \wedge$

$l_{ik} - j_{sa} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$D \geq n < n \wedge k \geq 1 \wedge$

$j_{sa} - j_{sa} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, k_1, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 1 \wedge s = s + k \wedge$

$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$

$$fz S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(\quad)} \sum_{(j_{ik} = j_{sa} + j_{sa}^{ik} - j_{sa})} \sum_{l_i + j_{sa} - l - s + 1}^{j_{sa} = l_i + n + j_{sa} - D - s}$$



$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - 1)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_s - l - j_{sa})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(l_s - l - j_{sa} - s)!}{(l_s + j^{sa} - n - 1)! \cdot (n - j^{sa} - s)!} \cdot$$

$$\sum_{k=l}^{( )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{l_s+j_{sa}-l} \sum_{j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}}^{( )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{( )}$$

$$\frac{(2 \cdot j_{ik} + 2 \cdot j_{sa}^s + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot l_k)!}{(2 \cdot j_{ik} + 2 \cdot j_{sa}^s + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot l_k)! \cdot (n - s)!} \cdot$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$l_s \wedge l_i > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_i + j_{sa}^{ik} - l - s + 1)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - l - s + 1)} \sum_{(j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})} \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_i - j_{ik} - \mathbb{k}_1 + 1)}^{(n_i - j_{ik} + 1)} \sum_{(n_{is} = n + \mathbb{k} + j_{sa}^{ik} - j_{ik})}^{(n_{is} + j_{sa} - \mathbb{k}_2)} \frac{(n_i - j_{ik} - 1)! \cdot (n_i - n_{ik} - j_{ik} + 1)! \cdot (n_{is} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})! \cdot (n_{sa} - 1)!} \cdot \frac{(n_{sa} - 1)!}{(j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_{ik} + n - D)} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}} \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - \mathbb{k}_1} \sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)}^{(\quad)}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^s\} \wedge$$

$$s \geq 4 \wedge s = s + k \wedge$$

$$k_z: z \geq 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(j^{sa} + j_{sa}^{ik} - j_{sa})} \sum_{(j_{ik} = l_s + n + j_{sa}^{ik} - D - 1)}^{l_s + j_{sa} - l} \sum_{j^{sa} = l_{sa} + n - D}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - k_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l) - l + 1} \sum_{(j_{ik} = l_s + n + j_{sa}^{ik} - D) \dots (j_{sa} = l_s + \dots - l + 1)}$$

$$\sum_{n_i = n + k_1}^n \sum_{(n_i - j_{ik} - 1) \dots (n_{ik} + j_{ik} - j_{sa} - k_2)} \sum_{(n_{is} = n + k_1 + j_{sa}^{ik} - j_{ik}) \dots (n_{sa} = n - j^{sa} + 1)}$$

$$\frac{(n_i - n_{ik})!}{(n_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

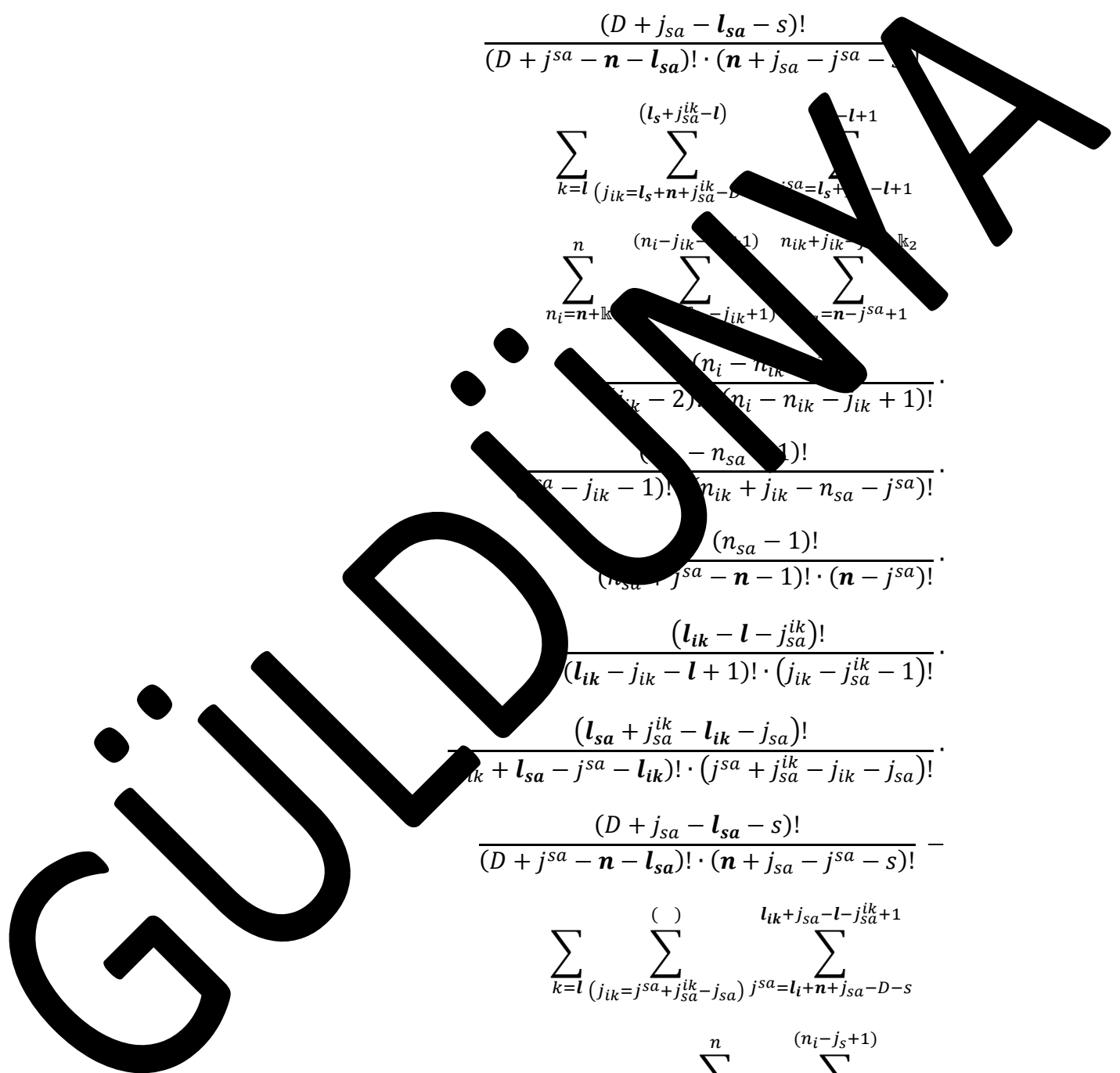
$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{( )} \sum_{(j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa})} \sum_{(j^{sa} = l_i + n + j_{sa} - D - s)}^{l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1}$$

$$\sum_{n_i = n + k_1}^n \sum_{(n_{is} = n + k_1 + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^{ik} - j_{sa} - k_1} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - k_2)}^{( )}$$



$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - \mathbf{n} - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (\mathbf{n} - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - \mathbf{n} - l_i - j_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!}$$

$$((D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa})) \wedge$$

$$D \geq \mathbf{n} < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{ik} \leq j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = j_{sa} + \mathbb{k} \wedge$$

$$\mathbb{k}_2 = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz_{j_{ik} j_{sa}^{ik}}^{DOST} = \sum_{k=l}^{(l_{sa} + \mathbf{n} + j_{sa}^{ik} - D - j_{sa} - 1)} \sum_{(j_{ik} = l_s + \mathbf{n} + j_{sa}^{ik} - D - 1)}^{l_{sa} - l + 1} \sum_{j_{sa} = l_{sa} + \mathbf{n} - D}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}$$

$$\sum_{n_i = \mathbf{n} + \mathbb{k}}^n \sum_{(n_{ik} = \mathbf{n} + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = \mathbf{n} - j^{sa} + 1}^{(n_i - n_{ik} - 1)!}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{j_{ik}=l_{sa} + n + j_{sa}^{ik} - D - j_{sa}}^{j_{sa} - j_{ik} - j_{sa} - j_{sa}^{ik} - 1} \sum_{j_{sa}=j_{ik} + j_{sa} - j_{sa}^{ik} - 1}^{n_{ik} - j_{sa} - l_{k2}} \frac{(n_i - n_{ik} - j_{ik} + 1)!}{(j_{ik} - j_{sa} - 1)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{sa} - n_{sa} - 1)!}{(n_{sa} - j_{ik} - j_{sa} - j_{sa}^{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{(l_{ik} - l + 1)} \sum_{j_{ik}=l_i + n + j_{sa}^{ik} - D - s}^{j_{sa} - j_{ik} - j_{sa} - j_{sa}^{ik} - 1} \sum_{j_{sa}=j_{ik} + j_{sa} - j_{sa}^{ik} - 1}^{n_{ik} - j_{sa} - 1} \sum_{n_i=n+l_k}^n \sum_{n_{is}=n+l_k+j_{sa}^{ik}-j_{ik}}^{(n_i-j_s+1)}$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{\binom{()}{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - \mathbf{n} - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (\mathbf{n} - s)!}$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s + j_{sa}^{ik} - j_{ik} - \mathbf{l})! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j^{sa} + s - \mathbf{n} - \mathbf{l}_i - j_{sa})! \cdot (s + j_{sa} - j^{sa} - s)!}$$

$$D \geq \mathbf{n} < \mathbf{n} \wedge \mathbf{l} \neq \mathbf{l} \wedge \mathbf{l}_s \leq D - \mathbf{n} + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge$$

$$\mathbf{l}_{sa} \leq D + j_{sa} - \mathbf{n} \wedge \mathbf{l}_i \leq D + s - \mathbf{n} \wedge$$

$$D \geq \mathbf{n} < \mathbf{n} \wedge \mathbf{l} = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\}$$

$$s \geq 4 \wedge \mathbf{s} = s + \mathbb{k}$$

$$\mathbb{k} \cdot z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz \mathcal{S}_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=\mathbf{l}}^{(j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{sa}+1}^{\mathbf{l}_s+j_{sa}-\mathbf{l}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^{\mathbf{n}} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} - l + 1)}^{(l_s + j_{sa}^{ik} - l)}$$

$$\sum_{n_i = n + k_1}^n \sum_{(n_i - j_{ik} - 1)}^{(n_i - j_{ik} - 1)}$$

$$\frac{(n_i - n_{ik})!}{(n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{sa} - n_{sa})!}{(n_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{( )} \sum_{(j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa})}^{( )} \sum_{j^{sa} = j_{sa} + 1}^{l_s + j_{sa} - l}$$

$$\sum_{n_i = n + k_1}^n \sum_{(n_{is} = n + k_1 + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - k_1} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - k_2)}^{( )}$$

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$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa})!}$$

$$D \geq n < n \wedge l \neq i \wedge l_{sa} \leq D + j_{sa} - n \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2$$

$$S_{j_{ik}, j_{sa}}^{DOST} = \left( \sum_{k=l} \binom{()}{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{j^{sa}=j_{sa}+1}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \right)$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\left( \sum_{k=l}^{j^{sa} + j_{sa}^{ik} - j_{sa} - 1} \sum_{(j_{ik} = j_{sa}^{ik} + 1)} \sum_{j^{sa} = j_{sa} + 2}^{l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1} \right)$$

$$\sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - k_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_{ik} - l_{sa} - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l_{sa} - j_{sa}^{ik} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(l_{ik} - j_{sa} - j_{sa}^{ik})!}{(j_{ik} + j_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l}^{(l_{ik} - l + 1)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)} \sum_{j^{sa} = l_{ik} + j_{sa} - l - j_{sa}^{ik} + 2}^{l_{sa} - l + 1}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - k_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

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$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{l_{ik} + j_{sa}^{ik} - l - j_{sa}^{ik} + 1} \binom{l_{ik} + j_{sa}^{ik} - l - j_{sa}^{ik} + 1}{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}}$$

$$\sum_{j_{sa} = j_{sa}^{ik} + 1}^{n - j_{sa}^{ik} - j_{sa}^{ik} + 1} \binom{n - j_{sa}^{ik} - j_{sa}^{ik} + 1}{j_{sa} = j_{sa}^{ik} + 1}$$

$$n_{ik} = n_{is} + j_{sa}^{ik} - \mathbb{k}_1 \quad (n_{is} + j_{sa}^{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^{ik} - n_{sa} - j^{sa} - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{sa}^{ik} + n_{sa} - j^{sa} - n - j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n - s)!}$$

$$(l_s - l - 1)!$$

$$(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!$$

$$(D - l_i)!$$

$$(D + j_{sa}^{ik} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!$$

$$D \geq n < n \wedge l \neq 1 \wedge l_s \leq n - 1 \wedge$$

$$j_{sa}^{ik} \leq j_{sa} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j_{sa}^{ik} \leq n + j_{sa} - s \wedge$$

$$l_{ik} + j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa}^{ik} - n \wedge$$

$$l_s \leq n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z^{\mathcal{S}DOST}_{j_{ik}, j^{sa}} = \left( \sum_{k=l} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(j^{sa}=j_{sa}+1)} \sum_{n_i=n+\mathbb{k}} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)} \sum_{(n_{sa}=n-j^{sa}+1)} \frac{(n_i - j_{ik} - \mathbb{k}_1 + 1)}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \frac{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}{(n_{sa} - j^{sa} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \left( \sum_{k=l} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{(j^{sa}=j_{sa}+2)} \sum_{n_i=n+\mathbb{k}} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)} \sum_{(n_{sa}=n-j^{sa}+1)} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \right)$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{sa} - l + 1} \sum_{j^{sa} = l_s + j_{sa} - l + 1}$$

$$\sum_{n_i = n + l_k}^n \sum_{(n_{ik} = n + l_{k2} - j_{ik} + 1)}^{(n_i - j_{ik} - l_{k1} + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa}}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - j_{ik} - l_{k1} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_{ik} - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + j_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\left( \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) -$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i = n + l_k}^n \sum_{(n_{is} = n + l_k + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - l_{k1}} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - l_{k2})}^{( )}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot l_k)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot l_k)! \cdot (n - s)!} \cdot$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_{sa} \leq D + j_{sa} - n \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$j_{ik, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{ik}-1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(l_{ik}-1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{(l_{ik}-1)}$$

$$\sum_{n+l}^{(n_i-n_{ik}-1)} \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-n_{ik}-k_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-k_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) +$$

$$\left( \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(l_{ik}-l+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{l_{sa}-l+1} \right)$$

$$\sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_{ik}-l_{k_1}+1) \\ (n_{ik}=n+l_{k_2}-j_{ik}+1)}} \sum_{\substack{n_{sa}=n-j^{sa}+1 \\ (n_i-n_{ik}-1)! \\ (j_{ik}-2)! \cdot (n_i-n_{ik}-j_{ik}+1)! \\ (n_{ik}-n_{sa}-1)! \\ (j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-1)! \\ (n_{sa}-1)! \\ (n_{sa}+j^{sa}-n-1)! \cdot (n-j^{sa})! \\ (l_i-l-j_{sa}) \\ (l_{ik}-j_{ik}-l+1) \cdot (j_{ik}-j_{sa}^{ik}-1)! \\ (l_{sa}-l_{sa}-j_{sa}) \\ (j_{ik}+j_{sa}-j_{sa}-l_{ik}) \cdot (j^{sa}-j_{sa}^{ik}-j_{sa})! \\ (D-j_{sa}-l_{sa}-s)! \\ (n+l_{sa}-j^{sa}-n-l_{sa})! \cdot (n+l_{sa}-j^{sa}-s)!}} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l-1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_s+1) \\ (n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}} \sum_{\substack{(n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}) \\ (n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}} \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot l_k)!}{(2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot l_k)! \cdot (n-s)!} \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - n \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z^{DOST} = \left( \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}^{l_{sa} - l + 1} \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2} \frac{(n_i - n_{ik} - 1)!}{(n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa}^{ik} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \right) \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} + \left( \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{sa} - l + 1} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik} + 1}^{l_{sa} - l + 1} \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2} \right)$$



$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa} - 1)!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa}^{ik})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - l_{sa})!} \cdot \frac{(D + j^{sa} - l_{sa} - j_{sa}^{ik} - 1)!}{(D + j^{sa} - n - j_{sa}^{ik} - 1)! \cdot (j^{sa} - j_{sa}^{ik} - s)!} \cdot \sum_{k=0}^{(j_{sa}^{ik}-1)} \sum_{l_k=j_{sa}^{ik}+1}^n \sum_{a=j_{ik}+j_{sa}-j_{sa}^{ik}}^{(n_i-j_s+1)} \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k1}}^{(n_i-j_s+1)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k2})}^{(n_i-j_s+1)} \frac{(2 \cdot n_{is} + j_{sa}^s + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot l_k)!}{(2 \cdot n_{is} + j_{sa}^s + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot l_k)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$n_{ik} \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - n \wedge l_i \leq D + s - n \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}^{l_{sa} + 1} \sum_{n_i = n + \mathbb{k}}^n \sum_{n_{ik} = n_{ik} - \mathbb{k}_2 - j_{ik} + 1}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{j_{sa} + 1}^{j_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2} \frac{(n_{ik} - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_{ik} - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} -$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{\binom{()}{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}} \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - l)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s - \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i, \dots, j_{sa}^i\} \wedge$$

$$s - 4 \wedge s = j_{sa} - \mathbb{k} \wedge$$

$$\mathbb{k}_2 = 2 \wedge \mathbb{k} = \mathbb{k}_1 = \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik} j_{sa}}^{DOST} = \left( \sum_{k=l} \sum_{\binom{()}{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}} \sum_{j^{sa}=l_{sa}+n-D}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{\binom{()}{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \right)$$

$$\begin{aligned}
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \left( \sum_{k=l}^{(j^{sa} + j_{sa}^{ik} - j_{sa} - 1) l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1} \sum_{(j_{ik} = j_{sa}^{ik} + 1) j_{sa} = l_{sa} - n - D} \right) \\
 & \sum_{n_i = n + l_k}^n \sum_{(n_i - j_{ik} - 1) n_{ik} + j_{ik} - j_{sa} - l_k}^{(n_i - n_{ik} - 1) n_{ik} + j_{ik} - j_{sa} - l_k} \sum_{(n_i - n_{ik} - 1) n_{ik} + j_{ik} - j_{sa} - l_k}^{(n_i - n_{ik} - 1) n_{ik} + j_{ik} - j_{sa} - l_k} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{k=l}^{(l_{ik} - l + 1)} \sum_{(j_{ik} = j_{sa}^{ik} + 1) j_{sa} = l_{sa} - n - D}^{l_{sa} - l + 1} \\
 & \sum_{n_i = n + l_k}^n \sum_{(n_i - j_{ik} - l_{k_1} + 1) n_{ik} + j_{ik} - j^{sa} - l_{k_2}}^{(n_i - n_{ik} - 1) n_{ik} + j_{ik} - j^{sa} - l_{k_2}} \sum_{(n_i - n_{ik} - 1) n_{ik} + j_{ik} - j^{sa} - l_{k_2}}^{(n_i - n_{ik} - 1) n_{ik} + j_{ik} - j^{sa} - l_{k_2}} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
 \end{aligned}$$

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$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (D + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=0}^{j_{sa} - l - j_{sa}^{ik} + 1} \binom{D - s}{k} \binom{n - j_{sa} + 1}{n + k} \binom{n_{is} + j_{sa}^s - j_{sa}^{ik} - k_1}{n_{sa} = n_{ik} + j_{ik} - j^{sa} - k_2}$$

$$\sum_{k=0}^{n} \sum_{l=k}^{n - j_s + 1} \binom{n_{is} + j_{sa}^s - j_{sa}^{ik} - k_1}{n_{sa} = n_{ik} + j_{ik} - j^{sa} - k_2}$$

$$\sum_{k=0}^{n} \binom{n_{is} + j_{sa}^s - j_{sa}^{ik} - k_1}{n_{sa} = n_{ik} + j_{ik} - j^{sa} - k_2}$$

$$\frac{(2 \cdot n_{is} + j_{sa}^s + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot k)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot k)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D + l_i - n \wedge l \neq i_l \wedge l_s \leq D - n + 1 \wedge$$

$$D + l_{ik} + j_{sa}^{ik} - n - l_{sa} - j_{sa}^{ik} + 2 \leq l \leq i_l - 1 \wedge$$

$$j_{sa}^{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_Z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(n_i-j_{ik}+1)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{(n_i-j_{sa}+1)} \sum_{n_i=n+\mathbb{k}_1}^n \sum_{n_{is}=n+\mathbb{k}_2-j_{ik}+1}^{(n_i-j_{is}+1)} \sum_{n_{sa}=n-j_{sa}+1}^{(n_i-j_{sa}+1)}$$

$$\frac{(n_i-j_{ik}-2)! (n_i-n_{ik}-j_{ik}+1)!}{(j_{ik}-n_{sa}-1)! (n_{ik}+j_{ik}-n_{sa}-j_{sa})!} \cdot \frac{(n_{sa}-1)!}{(j_{sa}-n-1)! \cdot (n-j_{sa})!}$$

$$\frac{(l_{ik}-l-j_{sa}^{ik})!}{(l_{ik}-j_{ik}-l+1)! \cdot (j_{ik}-j_{sa}^{ik}-1)!} \cdot \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(l_{sa}+l_{sa}-j_{sa}-l_{ik})! \cdot (j_{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}$$

$$\frac{(D+j_{sa}-l_{sa}-s)!}{(D+j_{sa}-n-l_{sa})! \cdot (n+j_{sa}-j_{sa}-s)!}$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(n_i-j_{ik}+1)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}_1}^n \sum_{(n_{is}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{is}+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1}^{( )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{( )}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik}$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$S_{j_{ik}, j_{sa}}^{DOST} = \left( \sum_{k=l} \sum_{\binom{()}{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}} \sum_{\substack{l_s+j_{sa}-l \\ j_{sa}=l_{sa}+n-D}} \sum_{n_i=n+\mathbb{k}}^n \sum_{\substack{(n_i-j_{ik}-\mathbb{k}_1+1) \\ (n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}} \sum_{\substack{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2 \\ n_{sa}=n-j^{sa}+1}} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \right)$$

$$\begin{aligned}
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(j_{ik} - j_{sa}^{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \\
 & \left( \sum_{k=l}^{(j^{sa} + j_{sa}^{ik} - j_{sa} - 1)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_s + j_{sa} - l} \sum_{j^{sa} = l_s + n - D}^{n_{ik} + j_{ik} - j^{sa} - l_{k_2}} \right. \\
 & \sum_{n_i = n + l_k}^n \sum_{(n_{ik} = n + l_{k_2} - j_{ik} + 1)}^{(n_i - j_{ik} - l_{k_1} + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - l_{k_2}} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \\
 & \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{sa} - l + 1} \sum_{j^{sa} = l_s + j_{sa} - l + 1}^{n_{ik} + j_{ik} - j^{sa} - l_{k_2}} \\
 & \sum_{n_i = n + l_k}^n \sum_{(n_{ik} = n + l_{k_2} - j_{ik} + 1)}^{(n_i - j_{ik} - l_{k_1} + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - l_{k_2}} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
 \end{aligned}$$

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$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \left( \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) \sum_{k=l}^{( )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(l_i+n+j_{sa}-D)} \sum_{(j_s+1)} \sum_{(n_{is}+l_k)} \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \frac{(n_{is} + j_{ik} + j_{sa} - n_{sa} - s - j_{sa}^{ik} - 2 \cdot l_k)!}{(2 \cdot n_{is} + 2 \cdot j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot l_k)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$n \geq n < n \wedge l \neq i \wedge l \leq D - n + 1 \wedge$$

$$D + l_{sa} + j_{sa} - n_{sa} - j_{sa}^{ik} + 2 \leq l \leq i \wedge l - 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} - j_{sa}^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{sa}^{ik} + j_{sa}^{sa} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$



$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq l \wedge l_s \leq D - n + 1 \wedge$$

$$2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^l\} \wedge$$

$$s \geq 4 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2$$

$$fz S_{j_{ik} j_{sa}}^{T} = \sum_{l=1}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-k_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\left( \sum_{k=l}^{l_{sa}+n+j_{sa}^{ik}-D-j_{sa}-1} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_{sa}-l+1} \sum_{j^{sa}=l_{sa}+n-D}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_{ik} - l_{sa}^{ik})!}{(l_{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(j_{ik} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (l_{ik} - j_{sa})!}{(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})}^{l_{sa}-l+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k2}}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

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$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D, \dots, j_{sa}^{ik}=j_{ik}-j_{sa}^{ik})}$$

$$\sum_{(n+l_k, \dots, n+l_k+j_{sa}^{ik}-j_{ik})}^{(n-j_{sa}^{ik})}$$

$$\sum_{(n_{ik}=n_{is}+j_{sa}^{ik}-l_{k_1}, \dots, n_{ik}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^{ik} - n_{sa} - j^{sa} - j_{sa}^{ik} - 2 \cdot l_k)!}{(2 \cdot n_{is} + 2 \cdot j_{sa}^{ik} - n_{sa} - j^{sa} - n - j_{sa}^{ik} - 2 \cdot l_k)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} - s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l = l \wedge l_s \leq D - n - 1 \wedge$$

$$2 \leq l \leq D + l_{ik} + j_{sa}^{ik} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + l_s = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_i < n < l_{sa} \leq D + l_{ik} + j_{sa}^{ik} - n - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge l = l \geq 0 \wedge$$

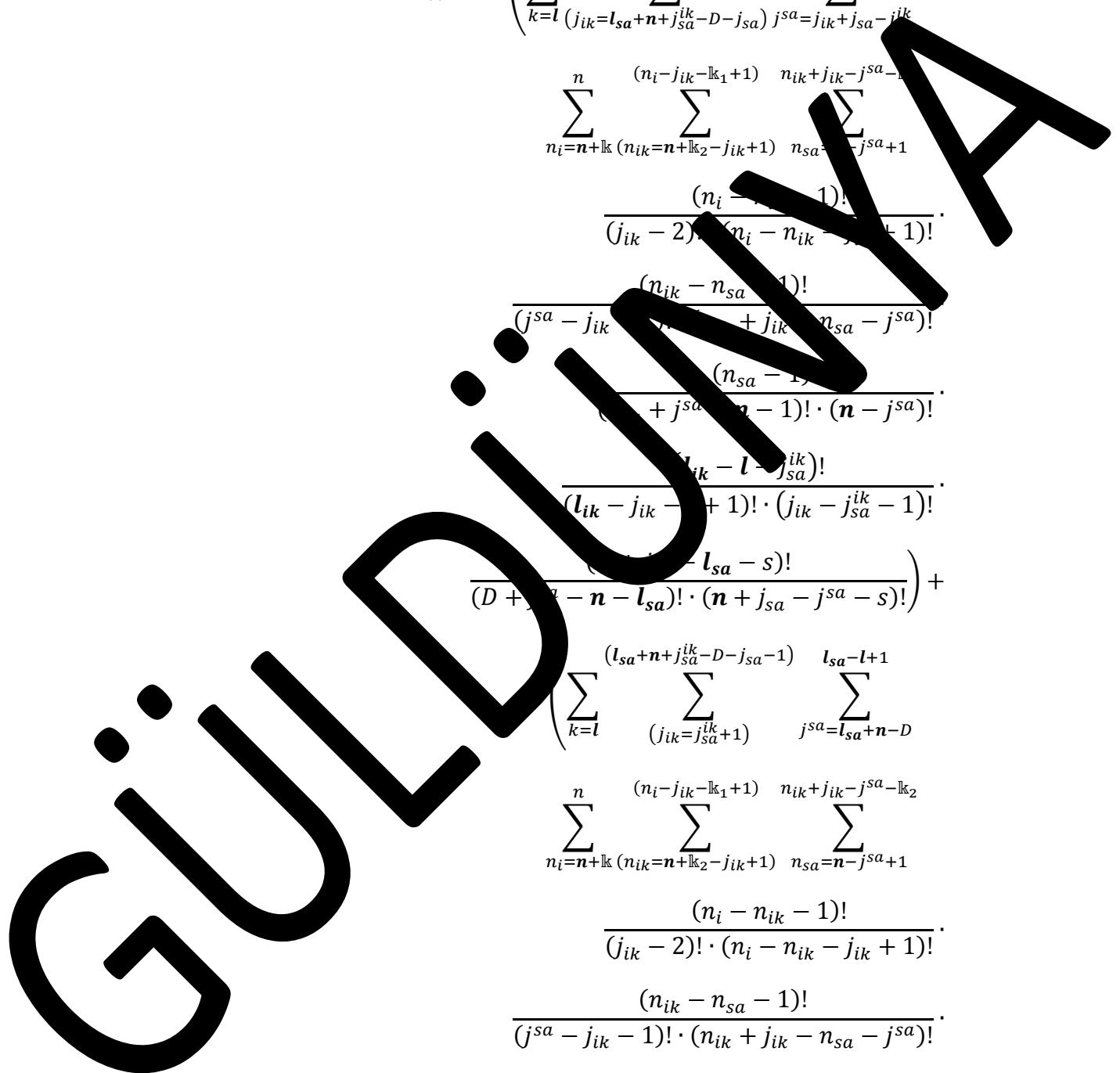
$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, l_{k_1}, j_{sa}^{ik}, l_{k_2}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$s \geq 4 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_z S_{j_{ik}, j^{sa}}^{DOST} = \left( \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_{sa} + n + j_{sa}^{ik} - D - j_{sa})} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{ik}} \right. \\ \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - 1} \\ \frac{(n_i - j_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\ \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\ \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\ \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\ \left. \frac{(l_{sa} - l - s)!}{(D + j_{sa}^{ik} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \right) \\ \left( \sum_{k=l}^{(l_{sa} + n + j_{sa}^{ik} - D - j_{sa} - 1)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{sa} - l + 1} \sum_{j^{sa} = l_{sa} + n - D}^{l_{sa} - l + 1} \right. \\ \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \\ \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\ \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\ \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\ \left. \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \right)$$



$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_{sa} + n + j_{sa}^{ik} - D - j_{sa})}^{l_{sa} - l + 1} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik} + 1}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k + j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - k_2)}^{n_i - j_{sa} - k_2}$$

$$\frac{(n_i - j_{ik} - 1)!}{(n_i - j_{ik} - 2)! \cdot (n_i - j_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{sa} - j_{sa} - 1)!}{(n_{sa} - j_{sa} - 2)! \cdot (n_{sa} - j_{sa} - j_{sa} + 1)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)}^{(l_s + j_{sa}^{ik} - l)} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - k_1}^{( )} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - k_2)}^{( )}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot k)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot k)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + k \wedge$$

$$k_2: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{n-l+1} \sum_{j_{sa}^{ik}=j_{sa}^{ik}+1}^{n-l+1} \sum_{j_{sa}^{ik}=j_{sa}^{ik}+1}^{n-l+1} \sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-k_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$



$$\sum_{k=l}^{(l_s+j_{sa}^{ik}-l)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{sa}^{ik})}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-\mathbb{k}_2)}^{(\cdot)} \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - \dots)}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n_{is} - s)!} \cdot \frac{(l_s - l - \dots)}{(l_s + j_{sa}^{ik} - j_{ik} - \dots) \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - \dots)}{(D + j^{sa} + s - n - \dots - j_{sa}^{ik})! \cdot (n_{is} + j_{sa} - j^{sa} - s)!}$$

- $D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$
- $j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa}^{ik} \wedge$
- $j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa}^{ik} - s \wedge$
- $l_{ik} - j_{sa}^{ik} + 1 > l \wedge l_{sa} + j_{sa}^{ik} - j_{sa}^{ik} = l_{ik} \wedge$
- $l_{ik} \leq D + j_{sa}^{ik} - n \wedge l_{sa} \leq D + s - n \wedge$
- $D \geq n < n \wedge l_{sa}^{ik} \geq 0 \wedge$
- $j_{sa} \leq j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} = j_{sa}^{ik} - 1 \wedge j_{sa} \leq j_{sa}^{ik} - 1 \wedge$
- $s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^{ik}\} \wedge$
- $s \geq j_{sa}^{ik} = s + \mathbb{k} \wedge$
- $\mathbb{k}_z: z = 2 \wedge \mathbb{k}_z = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{sa}+j_{sa}^{ik}-l-j_{sa}+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa} - 1)!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa})!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=0}^{l_s + j_{sa}^{ik} - 1} \sum_{l=0}^{j_{sa}^{ik} - 1} \sum_{m=0}^{n - j_{sa}^{ik} - l} \sum_{n+l+k}^{(n_i - j_s + 1)} \sum_{(n_{is} = n + l + k + j_{sa}^{ik} - j_{ik})} \sum_{k=n_{is} + j_{sa}^s - j_{sa}^{ik} - l_{k1}}^{( )} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - l_{k2})} \frac{(2 \cdot n_{is} + j_{sa}^s + l_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot l_k)!}{(2 \cdot j_{ik} + j_{sa}^s + l_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot l_k)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D - n) < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=0}^{\lfloor \frac{j_{sa} + l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1}{2} \rfloor} \sum_{\substack{j_{ik}=j_{sa}^{ik} \\ j_{sa}=l_i+n+j_{sa}-D-s}} \sum_{\substack{n_i=0 \\ n_{sa}=n-j_{sa}+1}}^n \frac{(n_i - \mathbb{k}_1 + 1) \dots (n_i + j_{ik} - j_{sa} - \mathbb{k}_2)}{(n_i + \mathbb{k} - j_{ik} + 1) \dots (n_{sa} - j_{sa} + 1)} \cdot \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(n_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} + \sum_{k=l}^{\lfloor \frac{l_{ik}-l+1}{2} \rfloor} \sum_{\substack{j_{ik}=j_{sa}^{ik}+1 \\ j_{sa}=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2}} \sum_{\substack{l_i+j_{sa}-l-s+1 \\ j_{sa}=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2}}$$

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$$\begin{aligned}
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l - l - j_{sa})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} - l_{sa} - j_{sa})!}{(j_{ik} + j_{sa} - j_{sa} - l_{ik})! \cdot (j^{sa} - j_{sa}^{ik} - j_{sa})!} \cdot \\
 & \frac{(n + j_{sa} - n - s)!}{(n + j_{sa} - n - 1)! \cdot (n - j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{( )} \sum_{(j_{ik} + j_{sa}^{ik} - j_{sa})}^{l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1} j^{sa} = l_i + n + j_{sa} - D - s \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1}^{( )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{( )} \\
 & \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n - s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

$$((D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz S_{j_{ik} j_{sa}}^{DOST} = \sum_{l=0}^n \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(j_{ik}-s-1)} \sum_{j_{sa}=l_i+n+j_{sa}-D-s}^{l_i+j_{sa}-l-s+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{l_i+j_{sa}-l-s+1} j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}}$$

$$\frac{(n_i - n_{ik} - 1)}{(j_{ik} - 2)! \cdot (n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} + j_{sa} - n - 1)!}{(n_{sa} - j^{sa})!} \cdot$$

$$\frac{(l_{ik} - j_{sa} - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + j_{sa} - j^{sa} - l_{sa})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{l_i+j_{sa}-l-s+1} j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_{k_2}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{()}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot l_k)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot l_k)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

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$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$\sum_{j_{ik}, j_{sa}^{ik}}^{(j^{sa} + k - j_{sa})} \sum_{j_{sa}^{ik} = l_i + n + j_{sa} - D - s}^{l_s + j_{sa} - l} \sum_{i=n+k}^n \sum_{(n_i = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - k_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

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$$\begin{aligned}
& \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_i + j_{sa} - l - s + 1} j^{sa} = l_s + j_{sa} - l + 1 \\
& \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa}}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_i - 1)!}{(n_i + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{ik} - 1)!}{(l_{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - 1)!}{(j_{ik} + j_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
& \sum_{k=l}^{( )} \sum_{(j_{ik} = j_{sa} + j_{sa}^{ik} - j_{sa})}^{l_s + j_{sa} - l} j^{sa} = l_i + n + j_{sa} - D - s \\
& \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)} \\
& \sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - \mathbb{k}_1}^{( )} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \\
& \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n - s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
\end{aligned}$$



$$D \geq n < n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z S_{j_{sa}^{ik}}^{DOST} = \sum_{k=l}^{n+j_{sa}^{ik}-D-s+1} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_i+j_{sa}^{ik}-s+1} \sum_{j=l_i+n+j_{sa}-D-s}^{n_{sa}=n-j_{sa}^{ik}+1} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(l_s+j_{sa}^{ik}-l)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{l_i+j_{sa}-l-s+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!}$$

$$\frac{(n_i - 1)!}{(n_i + j_{sa} - n - 1)! \cdot (n - j_{sa})!}$$

$$\frac{(l_{ik} - j_{ik} - 1)!}{(l_i - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - 1)!}{(j_{ik} + j_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(l_s+j_{sa}^{ik}-l)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j_{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_{z, j_{sa}^{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{\binom{l_{ik}+j_{sa}-j_{sa}^{ik}+1}{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}} \sum_{j_{sa}^{ik}=j_{sa}+1}^{\binom{l_{ik}+j_{sa}-j_{sa}^{ik}+1}{j_{sa}^{ik}=j_{sa}+1}} \sum_{n_i=n+k}^{\binom{n_i-j_{sa}^{ik}+k_1+1}{n_i=n+k}} \sum_{n_{ik}=n+k_2-j_{ik}+1}^{\binom{n_{ik}+j_{ik}-j_{sa}-k_2}{n_{ik}=n+k_2-j_{ik}+1}} \sum_{n_{sa}=n-j_{sa}+1}^{\binom{n_{sa}-j_{sa}+1}{n_{sa}=n-j_{sa}+1}}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot$$

$$\sum_{k=l}^{\binom{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}} \sum_{j_{sa}^{ik}=j_{sa}+1}^{\binom{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}{j_{sa}^{ik}=j_{sa}+1}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n-s)!}$$

$$\frac{(l_s - l_i - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - l - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - j_{sa}^{ik} - j_{ik} - l)! \cdot (n - j_{sa}^{ik} - j_{ik} - l - 1)!}$$

$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - l_i \wedge l_i + j_{sa} - s > l_s \wedge$

$D + s - n < l_i \leq D + l_{sa} - s - n - j_{sa} \wedge$

$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$

$j_{sa} \leq i - 1 \wedge j_{sa}^{ik} \leq i_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$

$s \in \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^{ik}\} \wedge$

$s \geq 1 \wedge s = s + \mathbb{k}$

$z: z = z + \mathbb{k} = \mathbb{k}_1 + \mathbb{k} \Rightarrow$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{j^{sa}=j_{sa}+1}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \sum_{k=l}^{\binom{D}{l}} \sum_{\substack{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa} \\ j_{sa}^{ik}=l_i+n+j_{sa}-D}}^{\binom{D-l}{j_{sa}^{ik}-l_i+1}} \sum_{\substack{j_{sa}^{ik}=l_i+n+j_{sa}-D \\ j_{sa}^{ik} \leq j_{ik} - j_{sa}^{ik} + 1}} \frac{(n_{is} + j_{ik} + j_{sa}^{ik} - n_{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{sa}^s - n_{sa} + j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n \wedge l \neq i \wedge l \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa}^{ik} \wedge j_{sa}^{ik} \leq n_{sa} \wedge$$

$$j_{ik} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + j_{sa}^{ik} = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}}$$

$$\frac{(n_i-1)!}{(j_{ik}-2)! \cdot (n_i-n_{ik}+1)!} \cdot \frac{(n_{ik}-n_{sa}-1)!}{(j_{sa}-j_{ik})! \cdot (n_{ik}+j_{ik}-n_{sa}-j_{sa})!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j_{sa}-n-1)! \cdot (n-j_{sa})!} \cdot \frac{(l_{ik}-l_{sa}^{ik})!}{(l_{ik}-j_{ik}-l+1)! \cdot (j_{ik}-j_{sa}^{ik}-1)!} \cdot \frac{(D+j_{sa}-l_{sa}-s)!}{(D+j_{sa}-n-l_{sa})! \cdot (n+j_{sa}-j_{sa}-s)!}$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n-s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j_{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z^{DOST} = \sum_{k=l}^{(l_{ik}-l+1)} \sum_{j_{ik}=j_{sa}^{ik}+1}^{(n-j_{sa}^{ik}-k_1+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_{sa}=n-j^{sa}+1}^{(n_{ik}-n+k_2-j_{ik}+1)} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(l_{ik}-l+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n-s)!}$$

$$\frac{(l_s - l_i - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - l - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - \dots)! \cdot (n - \dots - j^{sa} - s)!}$$

$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} \leq l_i \wedge l_i + j_{sa} - s > l_s \wedge$

$D + s - n < l_i \leq D + l_s - n - 1 \wedge$

$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$

$j_{sa} \leq l_i - 1 \wedge j_{sa}^{ik} \leq l_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$

$s \in \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, j_{sa}\} \wedge$

$s \geq \dots \wedge s = s + \mathbb{k}$

$z: z = \dots \mathbb{k} = \mathbb{k}_1 + \mathbb{k} \Rightarrow$

$$fz S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(l_{sa}+j_{sa}^{ik}-l-j_{sa}+1)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$



$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-l_{sa})} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}$$

$$\sum_{(n_{is}=n+l_{sa}-j_{sa}^{ik}-j_{sa}^{ik})} \sum_{(n_{is}+j_{ik}+j_{sa}^{ik}-n_{sa}-s-j_{sa}^{ik}-2 \cdot k_1)}$$

$$\sum_{(n_{is}=n+l_{sa}-j_{sa}^{ik}-j_{sa}^{ik})} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}$$

$$\frac{(n_{is} + j_{ik} + j_{sa}^{ik} - n_{sa} - s - j_{sa}^{ik} - 2 \cdot k_1)!}{(2 \cdot n_{is} + 2 \cdot j_{sa}^{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot k_1)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$(D \geq l_i < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} - j_{sa}^{ik} \wedge j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n)) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_{z} S_{j_{ik}, j_{sa}}^{DOST} = \sum_{l=1}^{(j_{sa}^{ik} - j_{sa})} \sum_{\substack{j_{sa} = j_{sa} + 1 \\ (n_{ik} - \mathbb{k}_1 + 1) \leq j_{sa} \leq (n_{ik} - \mathbb{k}_2 + 1)}} \sum_{\substack{n_{ik} = n + \mathbb{k} \\ (n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}} \sum_{\substack{n_{sa} = n - j_{sa} + 1 \\ (n_{sa} - \mathbb{k}_1 + 1) \leq n_{sa} \leq (n_{sa} - \mathbb{k}_2 + 1)}} \frac{(j_{sa}^{ik} - j_{sa}) l_{ik} + j_{sa}^{ik} - \mathbb{k} + 1}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_i - n_{ik} - 1)!}{(n_{sa} - n_{sa} - 1)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} + \sum_{k=l}^{(l_{ik} - l + 1)} \sum_{\substack{j_{sa} = l_{ik} + j_{sa} - l - j_{sa}^{ik} + 2 \\ (j_{ik} = j_{sa}^{ik} + 1)}} \sum_{\substack{l_{sa} - l + 1 \\ (n_i - j_{ik} - \mathbb{k}_1 + 1) \leq n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2 \\ (n_{sa} = n - j_{sa} + 1)}} \sum_{n_i = n + \mathbb{k}}^n \sum_{\substack{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}} \sum_{n_{sa} = n - j_{sa} + 1}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa} - 1)!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa}^{ik})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - l_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa})!}{(D + j^{sa} - n - l_{sa})! \cdot (n_{sa} + j_{sa}^{ik} - j^{sa} - s)!} \cdot \sum_{k=l}^{l_{ik} + j_{sa}^{ik} - j_{sa}^{ik} + 1} \sum_{j_{sa}^{ik} = j_{sa}^{ik} + 1}^{j_{sa}^{ik} + 1} \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - \mathbb{k}_1} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{( )}$$

$$\frac{(n_{is} + j_{sa}^s + j_{sa}^{ik} - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$(D > n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n)) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$j_{sa}^{DOST} = \sum_{k=l}^{(l_{ik}-l+1)} \sum_{j_{sa}^{ik}=j_{sa}+1}^{l_{sa}-l+1} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{n} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{j_{ik}-\mathbb{k}_1+1} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{sa}^{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k1}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}^{ik_2})}^{(\quad)}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - s - j_{sa}^{ik} - l_{k1})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot l_k)! \cdot (n_{is} - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik})! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - n - 1)!}{(D + j_{sa} + s - n - j_{sa})! \cdot (n_{is} + j_{sa} - j_{sa} - s)!}$$

$$((D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1)) \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa}$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n - 1 \leq D + l_s + j_{sa} - n - 1)$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + j_{sa} - n - 1 \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$D + s - n - 1 \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, l_{k1}, j_{sa}^{ik}, l_{k2}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + l_k \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
 f_z S_{j_{ik}, j^{sa}}^{DOST} &= \sum_{k=l} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{j^{sa}=l_{sa}+n-D}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \\
 &\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
 &\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \\
 &\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \\
 &\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \\
 &\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \\
 &\frac{(l_{sa} + j_{sa}^{ik})! (l_{ik} - j_{sa})!}{(l_{sa} - j_{sa} - l_{ik})! (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \\
 &\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 &\sum_{k=l} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(l_{ik}-l+1)} \sum_{j^{sa}=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2}^{l_{sa}-l+1} \\
 &\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
 &\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \\
 &\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \\
 &\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \\
 &\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}
 \end{aligned}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{(\quad)} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})}^{(\quad)} \sum_{(j_{sa}=l_i+n+j_{sa}-D-s)}^{l_{ik}+j_{sa}-l-j_{sa}+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k)}^{(n_i+l_k+1)} \sum_{(j_{ik})}$$

$$\sum_{(n_{ik}=n_{is}+j_{sa}^{ik}-l_k)}^{(\quad)} \sum_{(j_{sa}=l_i+n+j_{sa}-D-s)}^{(\quad)}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - s - j_{sa}^{ik} - 2 \cdot l_k)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - s - 2 \cdot j_{sa}^{ik} - 2 \cdot l_k)! \cdot (n - s)!}$$

$$\frac{(D - l - 1)!}{(j_{sa} + j_{sa}^{ik} - l - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j_{sa} + l_i - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$((D \geq n < n \wedge l_i = l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} - j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_{sa} \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_i \neq l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \wedge$$

$$D \geq n < n \wedge l_i = l_k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z^{\mathcal{S}_{j_{ik}, j_{sa}^{DOST}}} = \sum_{k=l} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(l_{sa}+n+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{j_{sa}^{sa}+n-D}^{l_{sa}-l+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j_{sa}^{sa}-\mathbb{k}_2}^{n_{ik}+j_{ik}-j_{sa}^{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa}^s)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa}^s)!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} - j_{sa} - j_{sa}^s - l_{ik})! \cdot (j_{sa}^s + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa}^s - s)!} + \sum_{k=l} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})}^{(l_{ik}-l+1)} \sum_{j_{sa}^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{l_{sa}-l+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}^{sa}+1}^{n_{ik}+j_{ik}-j_{sa}^{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa}^s - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa}^s)!}$$



$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \sum_{k=l}^{(l_{ik}-l+1)} \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D}^{j_{sa}^{ik}-D} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}}^{j_{sa}^{ik}-j_{sa}} \sum_{j_{sa}^{ik}=j_{sa}^{ik}-j_{sa}}^{j_{sa}^{ik}-j_{sa}} \sum_{n_{is}=n+l_k+j_{sa}^{ik}-j_{ik}}^{n_{is}+l_k} (n_{is}=n+l_k+j_{sa}^{ik}-j_{ik}) \sum_{n_{is}=n+l_k+j_{sa}^{ik}-j_{ik}}^{n_{is}+l_k} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k2}}^{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k2})} \frac{(n_{is} + j_{ik} + j_{sa} - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot l_k)!}{(2 \cdot n_{is} + 2 \cdot j_{sa} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot l_k)! \cdot (n - s)!} \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$(D \geq n < n \wedge l \neq l_i) \wedge l_s \leq D - n + 1 \wedge j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge (n_{is} + l_k > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l \neq l_i) \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$l_{sa} \leq D + j_{sa} - n \wedge l_i \leq D + s - n)) \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(j_{sa} + j_{sa}^{ik} - j_{sa} - l - j_{sa}^{ik} + 1)} \sum_{j_{sa}^{ik} = j_{sa}^{ik} + 1}^{j_{sa}^{ik} - j_{sa}^{ik} + 1} \sum_{j_{sa} = j_{sa} + 1}^{j_{sa} - j_{sa} + 1}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{ik} = n_{ik} - j_{ik} + 1)}^{(n_i - j_{ik} - 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{ik} + j_{ik} - j_{sa} - k_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(n_i - j_{ik} - 1)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} +$$

$$\sum_{k=l}^{(l_{ik} - l + 1)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{j_{sa}^{ik} - j_{sa}^{ik} + 1} \sum_{j_{sa} = l_{ik} + j_{sa} - l - j_{sa}^{ik} + 2}^{l_{sa} - l + 1}$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} + 1)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l - l - j_{sa})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} - l_{sa} - j_{sa})!}{(j_{ik} + j_{sa} - j_{sa} - l_{ik})! \cdot (j^{sa} - j_{sa}^{ik} - j_{sa})!} \cdot \\
 & \frac{(n + j_{sa} - n - s)!}{(n + j_{sa} - n - s)! \cdot (n - j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{( )} \sum_{j^{sa}=j_{sa}+1}^{l_s+j_{sa}-l} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}}^{( )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{( )} \\
 & \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot l_k)!}{(2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot l_k)! \cdot (n - s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

$$D \geq n < n \wedge l \neq i \wedge l \wedge l_{sa} \leq D + j_{sa} - n \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z \mathcal{S}_{j_{ik} j^{sa}}^{DOST} = \left( \sum_{k=l} \left( \sum_{j_{sa}+j_{sa}^{ik}-j_{sa}} \sum_{j_{sa}=j_{sa}+1}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \right. \right. \\ \left. \left. \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \right) \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{sa} - n_{sa} - 1)!}{(n_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \\ \left( \sum_{k=l} \left( \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(j^{sa}+j_{sa}^{ik}-j_{sa}-1)} \sum_{j_{sa}=j_{sa}+2}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \right. \right. \\ \left. \left. \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \right) \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \right)$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa})!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa})!} +$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{j_{sa}^{ik}=j_{sa}^{ik-1}+1}^{j_{sa}^{ik-1}+1} \sum_{n_i=n+l_k}^n \sum_{n_{ik}=n_{ik-1}-j_{ik}+1}^{(n_i-j_{ik}-1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-k_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(n_i - n_{ik} - j_{ik} + 1)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=l} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(l_s+j_{sa}-l)} \sum_{j^{sa}=j_{sa}+1}$$

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$$\frac{\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(\quad)} \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n-s)!} \cdot \frac{(l_s - l + 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - l + 1)!} \cdot \frac{(D - l_i)!}{(D + j_{sa} + s - n - j_{sa}^{ik} - j_{ik} - l)! \cdot (n_{is} - j_{sa} - s)!}}$$

$D \geq n < n \wedge l \neq i \wedge l_{sa} \leq D + j_{sa} - n$

$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} - 1$

$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j_{sa} \leq n + j_{sa} - s$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} \leq l_s$

$D \geq n < n \wedge l = \mathbb{k} \geq 0$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa} \leq j_{sa}^{ik} - 1$

$s: \{j_{sa}^{ik}, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^{ik}, j_{sa}^i\} \wedge$

$s \geq 4 \wedge s = s - \mathbb{k} \wedge$

$\mathbb{k}_2 = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \left( \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \right)$$

$$\begin{aligned}
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \left( \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_{ik}-l+1} \sum_{(j_{sa}=j_{ik}+j_{sa}^{ik}+1)}^{l_{ik}-l+1} \right) \\
 & \sum_{n_i=n+l_{ik}}^n \sum_{(n_i-j_{ik}+1)}^{(n_i-j_{ik}+1)} \sum_{(n_{ik}+j_{ik}-l_{k_2})}^{n_{ik}+j_{ik}-l_{k_2}} \\
 & \frac{(n_i - j_{ik} + 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{(l_s+j_{sa}^{ik}-l)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j_{sa}=j_{ik}+j_{sa}^{ik}-j_{sa}^{ik}} \\
 & \sum_{n_i=n+l_{ik}}^n \sum_{(n_i=n+l_{ik}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{( )}
 \end{aligned}$$

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$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$l_{sa} \leq D + j_{sa} - n \wedge l_i \leq D + s - n) \wedge$$

$$D \geq n < n \wedge l = i \wedge l_s \geq 0 \wedge$$

$$j_{sa}^i \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{l_s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i, \dots, j_{sa}^i\}$$

$$l_s \geq 4 \wedge l_s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k}_1 = \mathbb{k}_2 \wedge \mathbb{k}_2 \geq 2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_{sa}-l+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$



$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa})!}{(D + j^{sa} - n - l_{sa})! \cdot (D + j_{sa} - j^{sa})!}$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{j=j_{sa}^{ik}+1}^{n_{sa} - j_{sa}^{ik}}$$

$$\sum_{i=n+l_k}^{n_{sa} - j_{sa}^{ik}} \sum_{j=n+l_k}^{(n_{sa} - j_{sa}^{ik})}$$

$$\sum_{i=n+l_k}^{(n_{sa} - j_{sa}^{ik})} \sum_{j=n+l_k}^{(n_{sa} - j_{sa}^{ik})}$$

$$\frac{(2 \cdot n_{is} + j_{sa}^s + j_{sa}^{ik} - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot l_k)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot l_k)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D - n + 1 \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$2 \leq l \leq D - l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa} - j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z \mathcal{S}_{j_{ik}, j_{sa}}^{DOST} = \left( \sum_{k=l} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik})} \sum_{(j_{sa}=l_{sa}+n-D)} \frac{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}{(j_{ik}-j_{sa}-l+1)! \cdot (j_{sa}-l_{sa}+n-D)!} \right. \\ \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_i-j_{ik}-\mathbb{k}_1+1)}^{(n_i-j_{ik}-\mathbb{k}_2+1)} \sum_{(n_{sa}=n-j_{sa}+1)}^{n_{ik}+j_{ik}-\mathbb{k}_2} \\ \frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)! \cdot (n_i-n_{ik}-j_{ik}+1)!} \cdot \frac{(n_{ik}-n_{sa}-1)!}{(j_{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j_{sa})!} \\ \cdot \frac{(n_{sa}-1)!}{(j_{sa}-n-1)! \cdot (n-j_{sa})!} \\ \cdot \frac{(l_{ik}-l-j_{sa}^{ik})!}{(l_{ik}-j_{ik}-l+1)! \cdot (j_{ik}-j_{sa}^{ik}-1)!} \\ \left. \frac{(D+j_{sa}-l_{sa}-s)!}{(D+j_{sa}-n-l_{sa})! \cdot (n+j_{sa}-j_{sa}-s)!} \right) + \\ \left( \sum_{k=l} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{(j_{sa}=l_{sa}+n-D)} \frac{(j_{sa}+j_{sa}^{ik}-j_{sa}-1) l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}{(j_{sa}-l_{sa}+n-D)!} \right. \\ \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \\ \frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)! \cdot (n_i-n_{ik}-j_{ik}+1)!} \\ \cdot \frac{(n_{ik}-n_{sa}-1)!}{(j_{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j_{sa})!} \\ \left. \right)$$

$$\begin{aligned}
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(l_{ik}-l+1)} \sum_{(l_{ik}+j_{sa}-l-j_{sa}^{ik})}^{(l_{ik}-l+1)} \cdot \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_k+j_{ik}+1)}^{(n_{ik}=n+l_k+j_{ik}+1)} \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{sa}=n-j^{sa}+1)} \cdot \\
 & \frac{(n_i - 1)!}{(j_{ik} - 1)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(j^{sa} - j_{ik})! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) - \\
 & \sum_{k=l} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{( )} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_s+j_{sa}-l} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}
 \end{aligned}$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - l)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$

$2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$

$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$

$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge s \leq j_{sa}^{ik} - 1$

$s: \{j_{sa}^s - \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, \dots, j_{sa}^i\} \wedge$

$s - 4 \wedge s = s - \mathbb{k} \wedge$

$\mathbb{k}_2 = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \left( \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})} j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \right)$$

$$\begin{aligned}
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \left( \sum_{k=l}^{(l_{sa} + n + j_{sa}^{ik} - D - j_{sa} - 1)} \sum_{(j_{ik} = j_{sa}^{ik} + j^{sa} = j_{sa} - l + 1)} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik} + 1}^{n - D} \right) \\
 & \sum_{n_i = n + l_k}^n \sum_{(n_{ik} = n + l_{k_2} - j_{ik} + 1)}^{(n_i - j_{ik} - 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - l_{k_2}} \\
 & \frac{(n_i - n_{ik})!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{k=l}^{(l_{ik} - l + 1)} \sum_{(j_{ik} = l_{sa} + n + j_{sa}^{ik} - D - j_{sa})}^{l_{sa} - l + 1} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik} + 1} \\
 & \sum_{n_i = n + l_k}^n \sum_{(n_{ik} = n + l_{k_2} - j_{ik} + 1)}^{(n_i - j_{ik} - l_{k_1} + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - l_{k_2}} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
 \end{aligned}$$

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$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (D + j_{sa} - j^{sa} - 1)!}$$

$$\sum_{i=0}^{(l_{ik} + j_{sa}^{ik} - l)}$$

$$\sum_{k=0}^{n} \sum_{l=0}^{(n_i - j_s + 1)}$$

$$\sum_{k_1=0}^{(n_{is} + j_{sa}^s - j_{sa}^{ik} - k_1)} \sum_{k_2=0}^{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - k_2)}$$

$$\frac{(2 \cdot n_{is} + j_{sa}^s + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot k)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot k)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D - n > l \neq l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1 \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_{ik}+n-D)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{(n_{sa}=n-j_{sa}+1)}^{(n_{ik}+j_{ik}+j_{sa}-\mathbb{k}_2)} \frac{(n_i - n_{sa} - 1)!}{(j_{ik} - l - j_{sa}^{ik} - 1)! \cdot (n_{sa} - j_{sa} - 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik}=l_{ik}+n-D)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}_1+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-\mathbb{k}_2)}^{(\quad)} \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz \mathcal{S}_{j_{ik}, j_{sa}}^{DOST} = \sum_{l=0}^{j_{ik} - j_{sa}^{ik} - j_{sa}} \sum_{j_{sa}^{ik} = l + j_{sa} - l - s + 1}^{j_{sa}^{ik} - j_{sa} - l} \sum_{n_i = n + \mathbb{k}}^n \sum_{n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$



$$\sum_{k=l}^{\binom{)}{}} \sum_{j_{ik}=j_{sa}^{sa}+j_{sa}^{ik}-j_{sa}}^{l_s+j_{sa}-l} j_{sa}^{sa=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}$$

$$\sum_{n_i=n+l_k}^n \sum_{n_{is}=n+l_k+j_{sa}^{ik}-j_{sa}^{sa}}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}}^{\binom{)}{}} \sum_{n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}^{sa}-l_{k_2}}^{\binom{)}{}}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j_{sa}^{sa} - s - j_{sa}^{ik} - l_{k_1})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j_{sa}^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot l_{k_1})! \cdot (n_{is} - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{sa} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - 1)!}{(D + j_{sa}^{sa} + s - n - j_{sa}^{sa} - j_{sa}^{ik} - j_{sa}^{sa})! \cdot (n_{is} + j_{sa} - j_{sa}^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa}^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa}^{sa} \leq n + j_{sa}^{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l \wedge l_{sa} + j_{sa}^{ik} - j_{sa}^{sa} = l_{ik} \wedge l_{sa} - j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa}^{sa} - n \leq l_{sa} \leq n + l_s + j_{sa} - n_{sa} \wedge$$

$$D \geq n < n \wedge l_{k_1}, l_{k_2} \geq 0 \wedge$$

$$j_{sa}^{sa} \leq l_s - 1 \wedge j_{sa}^{ik} = j_{sa}^{sa} - 1 \wedge j_{sa} \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, l_{k_1}, l_{k_2}, j_{sa}, \dots, l_{sa}\} \wedge$$

$$s \geq j_{sa}^{sa} = s + l_{sa} \wedge$$

$$l_{k_z}: z = 2, \dots, k = l_{k_1} + l_{k_2} \Rightarrow$$

$$f_z S_{j_{ik} j_{sa}}^{DOST} = \sum_{k=l}^{\binom{)}{}} \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{(l_i+j_{sa}^{ik}-l-s+1)} \sum_{j_{sa}^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+l_k}^n \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}^{sa}+1}^{n_{ik}+j_{ik}-j_{sa}^{sa}-l_{k_2}}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa} - 1)!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa})!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{\Delta} \sum_{i=0}^{\Delta} \sum_{j=0}^{\Delta} \sum_{m=0}^{\Delta} \sum_{n=0}^{\Delta} \sum_{p=0}^{\Delta} \sum_{q=0}^{\Delta} \sum_{r=0}^{\Delta} \sum_{s=0}^{\Delta} \sum_{t=0}^{\Delta} \sum_{u=0}^{\Delta} \sum_{v=0}^{\Delta} \sum_{w=0}^{\Delta} \sum_{x=0}^{\Delta} \sum_{y=0}^{\Delta} \sum_{z=0}^{\Delta} \sum_{\substack{k=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1 \\ n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}} \frac{(l_s + j_{sa}^{ik} - l)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - 2 \cdot j_{sa}^{ik} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D > n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq n + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{sa}^{ik} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z^{DOST} S_{j_{ik}, j_{sa}} = \sum_{k=l}^{(j_{sa} + j_{sa}^{ik} - j_{sa})} \sum_{(j_{ik} = l_{ik} + n - D)} \sum_{j_{sa} = l_i + j_{sa} - D - s}^{l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1} \sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{ik} + j_{ik} - j_{sa} - k_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} + \sum_{k=l}^{(l_{ik} - l + 1)} \sum_{(j_{ik} = l_{ik} + n - D)} \sum_{j_{sa} = l_{ik} + j_{sa} - l - j_{sa}^{ik} + 2}^{l_i + j_{sa} - l - s + 1} \sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{ik} + j_{ik} - j_{sa} - k_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!}$$



$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik} j^{sa}}^{DOST} = \sum_{k=l} \sum_{(j_{ik}=l_{ik}+n-D)}^{(l_i+n+j_{sa}^{ik}-D-s-1)} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_i+j_{sa}-l-s+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}}$$

$$\frac{(n_i - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l_{sa}^{ik})!}{(l_{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{ik} + j_{sa}^{ik} - l_{sa})!}{(j_{ik} + l_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(l_{ik}-l+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{l_i+j_{sa}-l-s+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_{sa} + n + j_{sa}^{ik} - D - j_{sa} - k)} \sum_{(j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}$$

$$\sum_{(n + k)} \sum_{(n_{is} + k + j_{sa}^{ik} - j_{ik})}$$

$$n_{ik} = n_{is} + j_{sa}^{ik} - k_1 \quad (n_{ik} + j_{ik} - j^{sa} - k_2)$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^{ik} - n_{sa} - j^{sa} - j_{sa}^{ik} - 2 \cdot k)!}{(2 \cdot n_{is} + 2 \cdot j_{sa}^{ik} - n_{sa} - j^{sa} - n - j_{sa}^{ik} - 2 \cdot k)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j_{sa}^{ik} - s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge l_i \leq D + s - n) \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^l\} \wedge$$

$$s \geq 4 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_{z} S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{( )} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})}^{( )} \sum_{j_{sa}=j_{sa}+1}^{l+1} \sum_{n_i=n+l}^n \sum_{k_1=(n_{ik}-j_{ik}+1)}^{(j_{ik}-k_1+1)} \sum_{k_2=(n_{ik}+j_{ik}-j_{sa}-k_2)}^{(n_{ik}+j_{ik}-j_{sa}-k_2)} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - k_1)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{( )} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})}^{( )} \sum_{j_{sa}=j_{sa}+1}^{l_s+j_{sa}-l}$$

$$\sum_{n_i=n+l}^n \sum_{(n_{is}=n+l+k+j_{sa}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}-j_{sa}^{ik}-k_1}^{( )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-k_2)}^{( )}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa})!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_{sa} + s - n - j_{sa}$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$j_{ik}, j_{sa}^{OST} = \sum_{k=l} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{j_{sa}^{sa-l+1}}^{j_{sa}^{sa+1}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$



$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{\binom{D + j_{sa} - l_{sa} - s}{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}}} \sum_{j_{sa} = l_i + n + j_{sa} - D - s}^{l_s + j_{sa} - l} \sum_{n_i = n + k}^n \sum_{n_{is} = n_{is} + j_{sa}^{ik} - j_{ik}}^{(n_i - j_s + 1)} \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot k)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot k)! \cdot (n - s)!} \cdot \frac{(l_s + j_{sa} - j_{ik} - 1)!}{(j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(n + j_{sa} + j_{sa} - n - l_i - j_{sa} - s)! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l \neq l \wedge l \leq D - n + 1) \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D + j_{sa} - n < l_{ik} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq l \wedge l \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{sa} + j_{sa}^{ik} - l - j_{sa} + 1)} \sum_{(j_{ik} = l_{sa} + n + j_{sa}^{ik} - D - j_{sa})} j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_i - j_{ik} - \mathbb{k}_1 + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + j_{sa} - j_{sa}^{ik} + 1)}^{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + j_{sa} - j_{sa}^{ik} + 1)}$$

$$\frac{(n_{sa} - n_{ik} - 1)!}{(j_{sa} - 2)! \cdot (n_{sa} - n_{ik} - j_{ik} + j_{sa} - j_{sa}^{ik} - 1)!}$$

$$\frac{(j_{sa} - \mathbb{k}_k - 1)! \cdot (n_{ik} + j_{ik} - j_{sa} - j_{sa}^{ik} - 1)!}{(n_{sa} - j_{sa} - n - 1)! \cdot (n - j_{sa})!}$$

$$\frac{(n_{sa} - l - j_{sa}^{ik})!}{(n_{sa} - j_{sa} - n - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

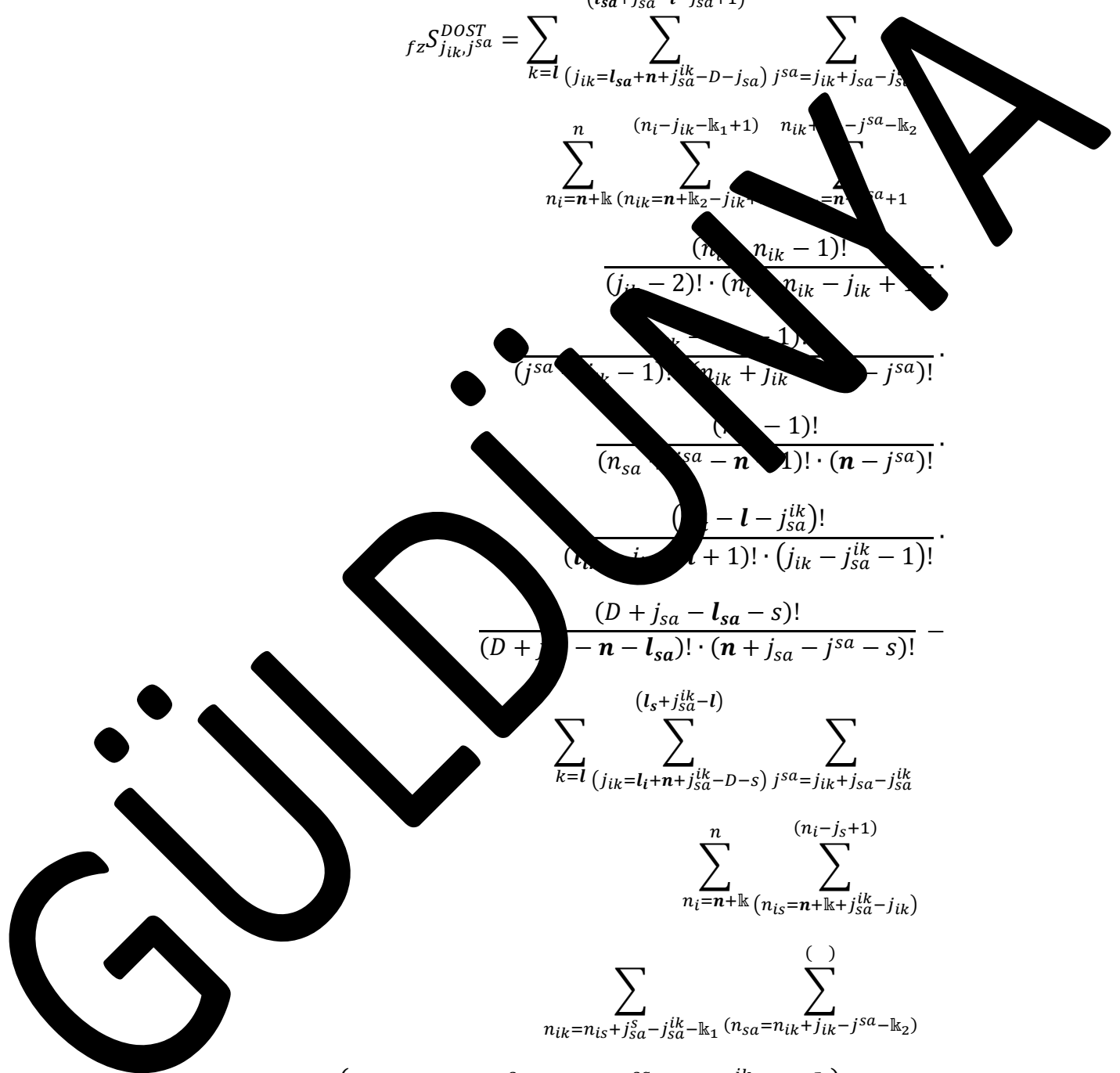
$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)} j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - \mathbb{k}_1} \sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)}^{()}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$



$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D + s - n < l_i \leq D + l_{sa} + s - n - j_{sa}) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - n = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, k_2, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = k_1 + k_2 \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 =$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(j^{sa} + j_{sa}^{ik} - j_{sa})} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_s + j_{sa} - l} \sum_{j_{sa} = l_{sa} + n - D}^{n_{ik} + j_{ik} - j^{sa} - k_2}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{(n_i - n_{ik} - 1)!}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{l_s + j_{sa}^{ik} - l} \sum_{j_{ik} = j_{sa}^{ik} - j_{sa} - l + k} \sum_{j_{sa} = l_s + j_{sa} - l + k}$$

$$\sum_{n_i = n - j_{ik} - l + k}^n \sum_{n_{ik} = n + l_{ik} - j_{ik} - 1}^{n - j_{ik} - l + k} \sum_{n_{sa} = n - j^{sa} + 1}^{n - j_{ik} - l + k - j_{sa} - l_{k2}}$$

$$\frac{(n_i - j_{ik} - l + k - 1)!}{(j_{ik} - j_{sa}^{ik} - l + k)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{sa} - n_{sa} - 1)!}{(n_{sa} - j_{ik} - l + k - j_{sa})! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l} \sum_{j_{ik} = j_{sa}^{ik} + j_{sa}^{ik} - j_{sa}}^{( )} \sum_{j_{sa} = l_i + n + j_{sa} - D - s}^{l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1}$$

$$\sum_{n_i = n + l_k}^n \sum_{n_{is} = n + l_k + j_{sa}^{ik} - j_{ik}}^{(n_i - j_s + 1)}$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - l)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D + s - n < l_i \leq D + l_{sa} + s - n - j_{sa}^{ik} \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$n \geq n < n \wedge I = \mathbb{k} \geq 0$$

$$j_{sa} \leq j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} \leq j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{sa}+n+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_{sa}-l+1} \sum_{j_{sa}=l_{sa}+n-D}$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_{ik}-l_{k_1}+1) \\ (n_{ik}=n+l_{k_2}-j_{ik}+1)}}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{l=1}^{(l_s + j_{sa}^{ik})} \sum_{j_{ik}=l_{sa} - l + j_{sa}^{ik} - D - j_{sa}}^{l_{sa} - l + 1} \sum_{j^{sa}=j_{ik} + j_{sa} - j_{sa}^{ik}}^{j^{sa}} \\
 & \sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_{ik}-l_{k_1}+1) \\ (n_{ik}=n+l_{k_2}-j_{ik}+1)}}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -
 \end{aligned}$$

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$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(l_{ik}-l+1)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k+j_{sa}^{ik}-j_{sa}^{ik})}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-k_1} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-k_2)}^{(n_{ik}-k_1)} \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - k_1)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot k)! \cdot (n_{is} - s)!} \cdot \frac{(l_s - l - k_1)!}{(l_s + j_{sa}^{ik} - j_{ik})! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - n - k)!}{(D + j^{sa} + s - n - j_{sa}^{ik} - j_{sa}^{ik} + j_{sa} - j^{sa} - s)!}$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1) \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_{sa} + j_{sa}^{ik} - j_{sa} \wedge l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1) \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa}^{ik} + 1 > l_s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D + j_{sa} - n < l_i \leq D + l_{sa} + s - n - j_{sa} \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1) \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_{z \neq j_{sa}^{ik}}^{OST} = \sum_{k=l}^{n+1} \sum_{(j_{ik} = n-D)}^{j_{sa} + j_{sa}^{ik} - j_{sa} - l - j_{sa}^{ik} + 1} \sum_{j_{sa} = l_{sa} + n - D}^{j_{sa} - l - j_{sa}^{ik} + 1}$$

$$\sum_{i=n+\mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{j_{ik} - \mathbb{k}_1 + 1} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} +$$



$$\begin{aligned}
 & \sum_{k=l} \sum_{(j_{ik}=l_{ik}+n-D)}^{(l_{ik}-l+1)} \sum_{(j^{sa}=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2)}^{l_{sa}-l+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{(n_{sa}=n-j_{sa}+j_{sa}^{ik})}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} + j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{sa} - j_{sa}^{ik} - j^{sa})!} \cdot \\
 & \frac{(n_i - j_{ik} - l_{k_1} - 1)!}{(n_i + j^{sa} - n - l_{k_1} - 1)! \cdot (n - j^{sa} - l_{k_1})!} \cdot \\
 & \frac{(l_{ik} - j_{ik} - l_{k_1} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}{(j_{ik} + j_{sa} - j^{sa} - l_{ik} - j_{sa}^{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j^{sa} - l_{sa} - s)!}{(D + j^{sa} - l_{sa} - s)! \cdot (n + j_{sa} - j^{sa} - s)!} \\
 & \sum_{k=l} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})}^{( )} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)}^{l_s+j_{sa}-l} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{( )} \\
 & \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot l_k)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot l_k)! \cdot (n - s)!} \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

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$$\left( (D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \wedge$$

$$D + s - n < l_i \leq D + l_{sa} + s - n - j_{sa}) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \wedge$$

$$D < n < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
 f_{j_{ik}, j_{sa}}^{S_{DOST}} = & \sum_{k=l}^{(l_{sa}+n+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{(j_{ik}=l_{ik}+n-D)}^{l_{sa}-l+1} \sum_{j_{sa}=l_{sa}+n-D}^{l_{sa}-l+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \\
 & \frac{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa} - 1)!}{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - l_{sa} - s)! \cdot (n + j_{sa} - j_{sa} - s)!} + \\
 & \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})}^{(l_{ik}-l+1)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{l_{sa}-l+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
 \end{aligned}$$

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$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)} j_{sa} = j_{sa} + j_{sa} - j_{sa}^{ik}$$

$$\sum_{n, n+k}^n \sum_{(n_{is} = n_{is} + j_{sa}^{ik} - l)} (n_{is} + 1) j_{ik}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^{ik} - l} (n_{ik} - l_{k_1} - j_{sa} - l_{k_2})$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - s - j_{sa}^{ik} - 2 \cdot l_k)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - s - 2 \cdot j_{sa}^{ik} - 2 \cdot l_k)! \cdot (n - s)!}$$

$$\frac{(D - l - 1)!}{(j_{ik} + j_{sa} - l - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j_{sa} + n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

- $((D \geq n < n \wedge l \neq l_i \wedge l_s \leq D - n + 1 \wedge$
- $j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$
- $j_{ik} - j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - s \wedge$
- $l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$
- $D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1) \vee$
- $(D \geq n < n \wedge l \neq l_i \wedge l_s \leq D - n + 1 \wedge$
- $j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$
- $j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - s \wedge$
- $l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$
- $D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1 \wedge$
- $D + s - n < l_i \leq D + l_{sa} + s - n - j_{sa}) \vee$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(\quad)} \sum_{\substack{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa} \\ j_{sa}^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}} \sum_{\substack{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1 \\ j_{sa}^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}} \\ \sum_{\substack{n_i=n+k \\ (n_{ik}=n+k_2-j_{ik}+1)}} \sum_{\substack{(n_i-j_{sa}^{ik}+k_1+1) \\ n_{ik}+j_{ik}-j_{sa}^{ik}-k_2 \\ n_{sa}=n-j_{sa}^{sa}+1}} \\ \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\ \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\ \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\ \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\ \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \\ \sum_{k=l}^{(\quad)} \sum_{\substack{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa} \\ j_{sa}^{sa}=l_i+n+j_{sa}-D-s}} \sum_{\substack{l_s+j_{sa}-l \\ j_{sa}^{sa}=l_i+n+j_{sa}-D-s}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^i-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n-s)!}$$

$$\frac{(l_s - l_i - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - l - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - j_{sa}^{ik} - j_{ik} - l)! \cdot (n_{sa} - j^{sa} - s)!}$$

$D \geq n < n \wedge l = i \wedge l_{sa} \leq D + j_{sa} - n$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1$

$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - 1 = l_i \wedge$

$D \geq n < n \wedge l = \mathbb{k} \geq 0$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{ik} \leq j_{sa}^{ik} - 1$

$s: \{j_{sa}^{ik}, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^{ik}, j_{sa}^i\} \wedge$

$s \geq 4 \wedge s = s - \mathbb{k} \wedge$

$\mathbb{k}_2 = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_z S_{j_{ik}, j^{sa}}^{DOST} = \left( \sum_{k=i}^l \sum_{(j_{ik}=j_{sa}^{ik})}^{( )} \sum_{j^{sa}=j_{sa}} \right)$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\begin{aligned}
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!} \right) + \\
 & \left( \sum_{k=i}^l \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{sa}^{i+l+1}}^{l_{sa}-i+l+1} \right. \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_k-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2}}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - l_{k_1} - 1)!}{(n_i - l_{k_1} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_i - n_{sa} - 1)!}{(j^{sa} - j_{sa} - 1)! \cdot (n_i + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{sa} - j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} - j_{sa})!} \cdot \\
 & \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) - \\
 & \sum_{k=i}^l \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{sa}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n_i-j_{ik}-l_{k_1}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2}}^{(n_i-j_{ik}-l_{k_1}+1)} \\
 & \frac{(2 \cdot n_i + j_{sa}^{ik} - n_{sa} - j_{ik} - j^{sa} - s - 2 \cdot l_{k_1} + j_{sa}^s)!}{(2 \cdot n_i - n_{sa} - j^{sa} - n - 2 \cdot l_{k_1} + j_{sa}^s)! \cdot (n - s)!} \\
 & \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}
 \end{aligned}$$

$$D \geq n < n \wedge l = i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge l_i \leq D + s - n \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

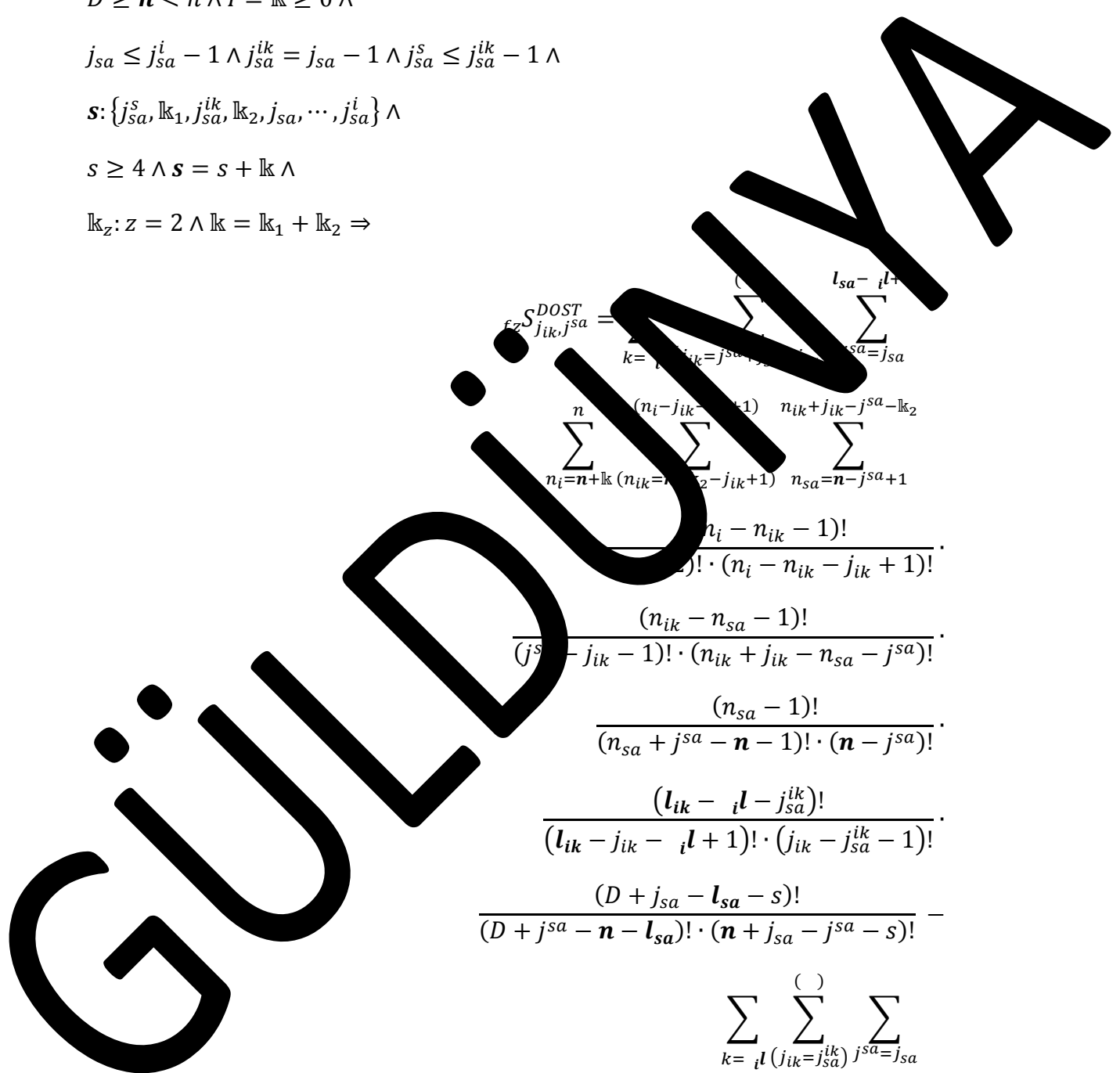
$$s \geq 4 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z^{DOST} S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=1}^{l_{sa}-i^l} \sum_{j_{sa}=j_{sa}}^{l_{sa}-i^l} \sum_{n_i=n+k}^n \sum_{(n_{ik}=n_i-j_{ik}-k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n_{ik}+j_{ik}-j_{sa}-k_2}^{n_{sa}=n-j_{sa}+1} \frac{(n_i - n_{ik} - 1)!}{(n_i - 1)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - i^l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i^l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=1}^{i^l} \sum_{(j_{ik}=j_{sa}^{ik})}^{()} \sum_{j_{sa}=j_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{ik}=n_i-j_{ik}-k_1+1)}^{()} \sum_{n_{sa}=n_{ik}+j_{ik}-j_{sa}-k_2}$$





$$\frac{(2 \cdot n_i + j_{sa}^{ik} - n_{sa} - j_{ik} - j^{sa} - s - 2 \cdot \mathbb{k} + j_{sa}^s)!}{(2 \cdot n_i - n_{sa} - j^{sa} - \mathbf{n} - 2 \cdot \mathbb{k} + j_{sa}^s)! \cdot (\mathbf{n} - s)!}$$

$$\frac{(D - l_i)!}{(D + s - \mathbf{n} - l_i)! \cdot (\mathbf{n} - s)!}$$

$$D \geq \mathbf{n} < n \wedge l = {}_i l \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D \geq \mathbf{n} < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\sum_{k=0}^{\binom{D}{i l}} \sum_{j_{sa}^{sa} = j_{sa}}^{l_{sa} - i l + 1} \sum_{n_i = \mathbf{n} + \mathbb{k}}^{\mathbf{n}} \sum_{(n_{ik} = \mathbf{n} + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = \mathbf{n} - j_{sa} + 1}^{n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \frac{(l_{ik} - {}_i l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - {}_i l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} - s)!}$$

$$\sum_{k=1}^{\infty} \sum_{i=1}^{\binom{D}{k}} \sum_{j^{sa}=j_{sa}}^{j_{ik}=j_{sa}^{ik}}$$

$$\sum_{n_i=n+k}^n \sum_{\binom{D}{k}} \sum_{n_{sa}=n_{ik}+j_{ik}-j_{sa}}$$

$$\frac{(2 \cdot n_i + j_{sa}^{ik} - n_{sa} - j_{ik} - j^{sa} - s - 2 \cdot k + j_{sa}^{ik})!}{(2 \cdot n_i - n_{sa} - j^{sa} - n - 2 \cdot k + j_{sa}^s) \cdot (n - s)!}$$

$$\frac{(D - l_i)!}{(D + s - l_i - 1)! \cdot (n - s)!}$$

$D \geq n < n \wedge l = i! \wedge l_s \leq D - n + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$

$D \geq n < n \wedge l = k \geq 0 \wedge$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa} \leq j_{sa}^i - 1 \wedge$

$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^s\}$

$s \geq 4 \wedge s = s + k \wedge$

$k_2: z \geq 2 \wedge k = k_1 \wedge k_2 \Rightarrow$

$$\sum_{k=1}^{\infty} \sum_{i=1}^{\binom{D}{k}} \sum_{j^{sa}=j_{sa}}^{l_{ik}+j_{sa}-i!-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+k}^n \sum_{\binom{D}{k}} \sum_{n_{sa}=n-j_{sa}+1}^{(n_i-j_{ik}-k_1+1) \cdot n_{ik}+j_{ik}-j_{sa}-k_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - i l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!}$$

$$\sum_{k=i}^l \sum_{\binom{()}{j_{ik}=j_{sa}^{ik}}} \sum_{j_{sa}=j_{sa}^{sa}}$$

$$\sum_{n_i=n+l_k}^n \sum_{\binom{()}{n_{ik}=n_i-j_{ik}-l_{k_1}+1}} \sum_{n_{sa}=n-n_{ik}-l_{k_2}}$$

$$\frac{(2 \cdot n_i + j_{sa}^{ik} - n_{sa} - j_{ik} - j_{sa}^{sa} - s - 2 \cdot l_k + j_{sa}^{sa})!}{(2 \cdot n_i - n_{sa} - j_{sa}^{sa} - s - 2 \cdot l_k + j_{sa}^{sa})! \cdot (n - s)!}$$

$$(D + j_{sa} - n - l_i)! \cdot (n - s)!$$

$$D \geq n < n \wedge l = i l \wedge l_s \leq D - n + 1$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{sa} - j_{sa} = l_{ik} \wedge$$

$$D \geq n < n \wedge l = i l \geq 0 \wedge$$

$$j_{sa}^{sa} \leq j_{sa}^{sa} - j_{sa}^{sa} = j_{sa}^{sa} - 1 \wedge j_{sa}^{sa} \leq j_{sa}^{sa} - 1 \wedge$$

$$s: \{j_{sa}^{sa}, l_{k_1}, j_{sa}^{ik}, l_{k_2}, \dots, j_{sa}^{sa}\}$$

$$s \geq 4, l_{k_1} = s + l_k \wedge$$

$$l_{k_2}: z = 2 \wedge l_{k_2} = l_{k_1} + 1 \Rightarrow$$

$$f_Z S_{j_{ik}, j_{sa}^{sa}}^{DOST} = \sum_{k=i}^l \sum_{\binom{()}{j_{ik}=j_{sa}^{ik}}} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \sum_{n_i=n+l_k}^n \sum_{\binom{()}{n_{ik}=n+l_{k_2}-j_{ik}+1}} \sum_{n_{sa}=n-j_{sa}^{sa}+1} \frac{(l_{sa}+j_{sa}^{ik}-i l-j_{sa}+1)!}{(j_{ik}-2)! \cdot (n_i - n_{ik} - 1)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - i^l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i^l + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!}$$

$$\sum_{k=1}^n \sum_{(j_{ik}=j_{sa}^{ik})} j^{sa}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_i-j_{ik}-l_{sa}^{ik}=1)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}$$

$$\frac{(2 \cdot n_i + j_{sa}^{ik} - n_{sa} - j^{sa} - s - 2 \cdot l_k + j_{sa}^s)!}{(2 \cdot n_i + n_{sa} - j^{sa} - n - 2 \cdot l_k + j_{sa}^s)! \cdot (n - s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l = i^l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{sa}^{ik} + j_{sa} - j_{sa} \leq j^{sa} \leq j_{sa}^{ik} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s - l_{sa} + j_{sa}^{ik} = l_{ik} \wedge$$

$$D \geq n < n \wedge l = l_k \geq 1 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}, l_{k_1}, j_{sa}^{ik}, l_{k_2}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + l_k \wedge$$

$$l_{k_2}: z = 2 \wedge l_k = l_{k_1} + l_{k_2} \Rightarrow$$

$$f_z S_{j_{ik}, j^{sa}}^{DOST} = \sum_{k=i^l}^{(l_{ik}-i^{l+1})} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{\substack{(n_i-j_{ik}-\mathbb{k}_1+1) \\ (n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}} \sum_{\substack{n_{sa}=n-j^{sa}+1 \\ (n_i-n_{ik}-1)! \\ (j_{ik}-2)! \cdot (n_i-n_{ik}-j_{ik}+1)! \\ (n_{ik}-n_{sa}-1)! \\ (j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-1)! \\ (n_{sa}-1)! \\ (n_{sa}+j^{sa}-n-1)! \cdot (n-j^{sa})! \\ (l_{ik}-j_{ik}-l_i+1)! \cdot (j_{ik}-j_{sa}^{ik}-1)! \\ (j_{sa}^{ik}-l_i-s)! \\ (D+n-j^{sa}-n-s)!}} \sum_{k=i}^{\binom{D}{i}} \sum_{\substack{j_{ik}=j_{sa}^{ik} \\ j^{sa}=j_{sa}}} \sum_{n_i=n+\mathbb{k}}^n \sum_{\substack{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1) \\ (n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}} \frac{(2 \cdot n_i + j_{sa}^{ik} - n_{sa} - j_{ik} - j^{sa} - s - 2 \cdot \mathbb{k} + j_{sa}^s)!}{(2 \cdot n_i - n_{sa} - j^{sa} - n - 2 \cdot \mathbb{k} + j_{sa}^s)! \cdot (n-s)!} \frac{(D-l_i)!}{(D+s-n-l_i)! \cdot (n-s)!}$$

$$D \geq n < n \wedge l = l_i \wedge l_i \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa}^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} - j_{sa}^{ik} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + j_{sa}^{ik} > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$l_{ik} - j_{sa}^{ik} - n \wedge l_i \leq D + s - n \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$s \geq 4 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_z S_{j_{ik}, j^{sa}}^{DOST} = \sum_{k=i}^l \sum_{(j_{ik}=j_{sa}^{ik})}^{(l_{sa}+j_{sa}^{ik}-i-l-j_{sa}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n_i+j_{ik}-j^{sa}-1}^{n_{ik}+j_{ik}-j^{sa}-1}$$

$$\frac{(n_i-1)!}{(j_{ik}-2)! \cdot (n_i-n_{ik}-j_{sa}+1)!} \cdot \frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-n_{sa}+j_{ik}-n_{sa}-j^{sa})!}$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-n-1)! \cdot (n-j^{sa})!} \cdot \frac{(n_i-j_{sa}^{ik})!}{(n_i-j_{ik}-j_{sa}^{ik}-1)! \cdot (j_{ik}-j_{sa}^{ik}-1)!}$$

$$\frac{(n_i+j_{sa}-l_{sa}-s)!}{(D+j_{sa}-n-l_{sa})! \cdot (n-s)!} \cdot \sum_{k=i}^l \sum_{(j_{ik}=j_{sa}^{ik})}^{(\quad)} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\quad)} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}^{(\quad)}$$

$$\frac{(2 \cdot n_i + j_{sa}^{ik} - n_{sa} - j_{ik} - j^{sa} - s - 2 \cdot \mathbb{k} + j_{sa}^s)!}{(2 \cdot n_i - n_{sa} - j^{sa} - n - 2 \cdot \mathbb{k} + j_{sa}^s)! \cdot (n-s)!}$$

$$\frac{(D-l_i)!}{(D+s-n-l_i)! \cdot (n-s)!}$$

$((D \geq n < n \wedge l = i \wedge l_s \leq D - n + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l = {}_i l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$l_{sa} \leq D + j_{sa} - n \wedge l_i \leq D + s - n)) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{i=l}^{(l_{ik} - i l + 1)} \sum_{(j_{ik} = j_{sa}^{ik})}^{l_{sa} - i l + 1} \sum_{j_{sa} = j_{sa}}^{n - (n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1}^{n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{sa} + j_{sa} - n - 1} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - i l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=1}^{\infty} \sum_{i=1}^{\binom{D}{k}} \sum_{j_{sa}=j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{\binom{D}{k}} \sum_{n_{sa}=n_{ik}+j_{ik}-j_{sa}}$$

$$\frac{(2 \cdot n_i + j_{sa}^{ik} - n_{sa} - j_{ik} - j^{sa} - s - 2 \cdot \mathbb{k} + j_{sa}^{ik})!}{(2 \cdot n_i - n_{sa} - j^{sa} - n - 2 \cdot \mathbb{k} + j_{sa}^{ik})! \cdot (n - s)!}$$

$$\frac{(D - l_i)!}{(D + s - l_i - 1)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l = i! \wedge l_{sa} \leq D + j_{sa} - n \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_k \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa} \leq j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^s\}$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_2: z \geq 2 \wedge \mathbb{k} = \mathbb{k}_1 \wedge \mathbb{k}_2 \Rightarrow$$

$$j_{ik}^{OST} j_{sa}^{sa} = \left( \sum_{k=1}^{\infty} \sum_{i=1}^{\binom{D}{k}} \sum_{j_{sa}=j_{sa}^{ik}}^{l_{ik}+j_{sa}-i!-j_{sa}^{ik}+1} \right)$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{\binom{D}{k}}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+\mathbb{k}_2}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$



$$\begin{aligned}
& \frac{(l_{ik} - i l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!} \right) + \\
& \left( \sum_{k=i l}^{(j^{sa} + j_{sa}^{ik} - j_{sa} - 1)} \sum_{(j_{ik} = j_{sa}^{ik})} \sum_{j_{sa}^{sa} = j_{sa} + 1}^{l_{ik} + j_{sa} - i l - j_{sa}^{ik}} \right. \\
& \sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{ik} + j_{ik} - j_{sa} - k_2} \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{ik} - i l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa} - j_{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \\
& \sum_{k=i l}^{(l_{ik} - i l + 1)} \sum_{(j_{ik} = j_{sa}^{ik})} \sum_{j_{sa} = l_{ik} + j_{sa} - i l - j_{sa}^{ik} + 2}^{l_{sa} - i l + 1} \\
& \sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{ik} + j_{ik} - j_{sa} - k_2} \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}
\end{aligned}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - i^l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i^l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=1}^n \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{sa}} \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n_i - j_{ik} - l_{k_1})} \sum_{n_{sa}=n_{ik} + j_{ik} - j^{sa} - l_{k_2}} (2 \cdot n_i + j_{sa}^{ik} - n_{sa} - j_{sa} - j^{sa} - 2 \cdot l_k + j_{sa}^s)! \cdot (2 \cdot n_i - n_{sa} - j^{sa} - n - 2 \cdot l_k + j_{sa}^s)! \cdot (n - s)! \cdot \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$D \geq n < n \wedge l = i^l \wedge l_{sa} \leq D - i_{sa} - n \wedge$

$j_{sa}^{ik} \leq i_{sa} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} - 1 \leq j^{sa} - n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge i_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$

$n \geq n < n \wedge l = l_k \geq 0 \wedge$

$j_{sa} \leq i_{sa} - 1 \wedge i_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, l_{k_1}, j_{sa}^{ik}, l_{k_2}, j_{sa}, \dots, j_{sa}^i\} \wedge$

$n \geq 4 \wedge s = s + l_k \wedge$

$l_{k_2}: z = 2 \wedge l_k = l_{k_1} + l_{k_2} \Rightarrow$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \left( \sum_{k=i^l}^{(l_{ik} - i^l + 1)} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_{ik}-l_{k_1}+1) \\ (n_{ik}=n+l_{k_2}-j_{ik}+1)}} \sum_{\substack{n_{ik}+j_{ik}-j^{sa}-l_{k_2} \\ n_{sa}=n-j^{sa}+1}} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - i^l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i^l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \left( \frac{(j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa} - s)!} \right) + \\
 & \left( \sum_{k=i^l}^{(l_{ik}-i^l)} \sum_{\substack{j_{sa}^{ik} \\ j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}} \sum_{l_{sa}-i^l+1} \right) \\
 & \sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_{ik}-l_{k_1}+1) \\ (n_{ik}=n+l_{k_2}-j_{ik}+1)}} \sum_{\substack{n_{ik}+j_{ik}-j^{sa}-l_{k_2} \\ n_{sa}=n-j^{sa}+1}} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - i^l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i^l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \left( \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) -
 \end{aligned}$$

GÜLDÜZMAYA

$$\sum_{k=1}^{\lfloor l \rfloor} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=n+\lfloor k \rfloor}^n \sum_{(n_{ik}=n_i-j_{ik}-\lfloor k_1 \rfloor+1)} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}}$$

$$\frac{(2 \cdot n_i + j_{sa}^{ik} - n_{sa} - j_{ik} - j^{sa} - s - 2 \cdot \lfloor k \rfloor + j_{sa}^{ik})!}{(2 \cdot n_i - n_{sa} - j^{sa} - n - 2 \cdot \lfloor k \rfloor + j_{sa}^s) \cdot (n-s)!}$$

$$\frac{(D - l_i)!}{(D + s - l_i)! \cdot (n-s)!}$$

$D \geq n < n \wedge l = \lfloor l \rfloor \wedge l_s \leq D - n + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - j_{sa}^{ik} > l_{sa} \wedge$

$l_i \leq D + s - n \wedge$

$D \geq n < n \wedge l = \lfloor k \rfloor \geq 0 \wedge$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \lfloor k_1 \rfloor, j_{sa}^{ik}, \lfloor k_2 \rfloor, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 4 \bullet s = s + \lfloor k \rfloor \wedge$

$\lfloor k_z \rfloor \cdot z = 2 \wedge \lfloor k \rfloor = \lfloor k_1 \rfloor + \lfloor k_2 \rfloor$

$$f_z S_{j_{ik}, j^{sa}}^{DOST} = \sum_{k=1}^{\lfloor l \rfloor} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=n+\lfloor k \rfloor}^n \sum_{(n_{ik}=n+\lfloor k_2 \rfloor-j_{ik}+1)}^{(n_i-j_{ik}-\lfloor k_1 \rfloor+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\lfloor k_2 \rfloor}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!}$$

$$\sum_{k=1}^n \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{sa}^{ik}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n_i-j_{ik}-l_{k_1}+1)} \sum_{(j_{ik}=j_{sa}^{ik}-l_{k_2})}$$

$$\frac{(2 \cdot n_i + j_{sa}^{ik} - n_{sa} - j_{ik} - j_{sa}^{ik} - s - 2 \cdot l_{k_1} + l_{k_2})!}{(2 \cdot n_i - n_{sa} - j_{sa}^{ik} - n - 2 \cdot l_{k_1} + l_{k_2})! \cdot (n - s)!}$$

$$\frac{(D - n)!}{(D + s - n - l_{sa})! \cdot (n - s)!}$$

$$((D \geq n < n \wedge l = l_i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - s \wedge l_i \leq D + s - n \vee$$

$$(D \geq n < n \wedge l = l_i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l = l_i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=1}^{(\quad)} \sum_{j_{sa}^{ik}}^{l_{sa} - i l + 1} \sum_{j_{sa} = j_{sa}}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{n_{ik} = n_i - j_{ik} - \mathbb{k}_1 + 1}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n_{ik} + j_{ik} - \mathbb{k}_2}^{n_{ik} + j_{ik} - \mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(n_i - j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{sa} - n_{sa} - 1)!}{(n_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} - j_{sa} - n - 1)! \cdot (n - j_{sa})!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - j_{sa} - l_{ik})! \cdot (j_{sa} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=1}^{(\quad)} \sum_{j_{sa}^{ik}}^{(\quad)} \sum_{j_{sa} = j_{sa}}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{n_{ik} = n_i - j_{ik} - \mathbb{k}_1 + 1}^{(\quad)} \sum_{n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2}^{(\quad)}$$

$$\frac{(2 \cdot n_i + j_{sa}^{ik} - n_{sa} - j_{ik} - j_{sa} - s - 2 \cdot \mathbb{k} + j_{sa}^s)!}{(2 \cdot n_i - n_{sa} - j_{sa} - n - 2 \cdot \mathbb{k} + j_{sa}^s)! \cdot (n - s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik})) \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2$$

$$\sum_{k=l}^{\infty} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(j^{sa}=l_{sa}+n-D)}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-k_2} \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\left( \sum_{k=l}^{(j^{sa} + j_{sa}^{ik} - j_{sa} - 1)} \sum_{(j_{ik} = l_{ik} + n - D)} \sum_{j^{sa} = l_{sa} + n - D}$$

$$\sum_{n_i = n + \mathbb{k}_k}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa}}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_{ik} - l_{sa}^{ik})!}{(l_{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(j_{ik} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l}^{(l_{ik} - l + 1)} \sum_{(j_{ik} = l_{ik} + n - D)} \sum_{j^{sa} = l_{ik} + j_{sa} - l - j_{sa}^{ik} + 2}^{l_{sa} - l + 1}$$

$$\sum_{n_i = n + \mathbb{k}_k}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$



$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{( )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{l_{ik}+j_{sa}^{ik}-j_{sa}^{ik}+1} \binom{l_{ik}+j_{sa}^{ik}-j_{sa}^{ik}+1}{l_{ik}+n+l_{sa}-D-s}$$

$$\sum_{n+l_{sa}}^{(n_i-j_{sa}^{ik})} \sum_{(n_{is}+l_{sa}+j_{sa}^{ik}-j_{ik})}$$

$$n_{ik}=n_{is}+j_{sa}^{ik}-l_{sa}^{ik}-l_{sa}^{ik} \quad (n_{is}+l_{sa}+j_{sa}^{ik}-j_{ik}-j^{sa}-l_{sa}^{ik})$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^{ik} - n_{sa} - j^{sa} - j_{sa}^{ik} - 2 \cdot l_{sa}^{ik})!}{(2 \cdot n_{is} + 2 \cdot j_{sa}^{ik} - n_{sa} - j^{sa} - n - j_{sa}^{ik} - 2 \cdot l_{sa}^{ik})! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j_{sa}^{ik} - s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

- $((D \geq n < n \wedge l_s > D - n + 1 \wedge$
- $D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 2 \leq l \leq D - n + 1 \wedge$
- $j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$
- $j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$
- $(l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik}) \vee$
- $(D < n \wedge l_s > D - n + 1 \wedge$

- $D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 2 \leq l \leq D - n + 1 \wedge$
- $j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$
- $j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \Big) \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^l\} \wedge$$

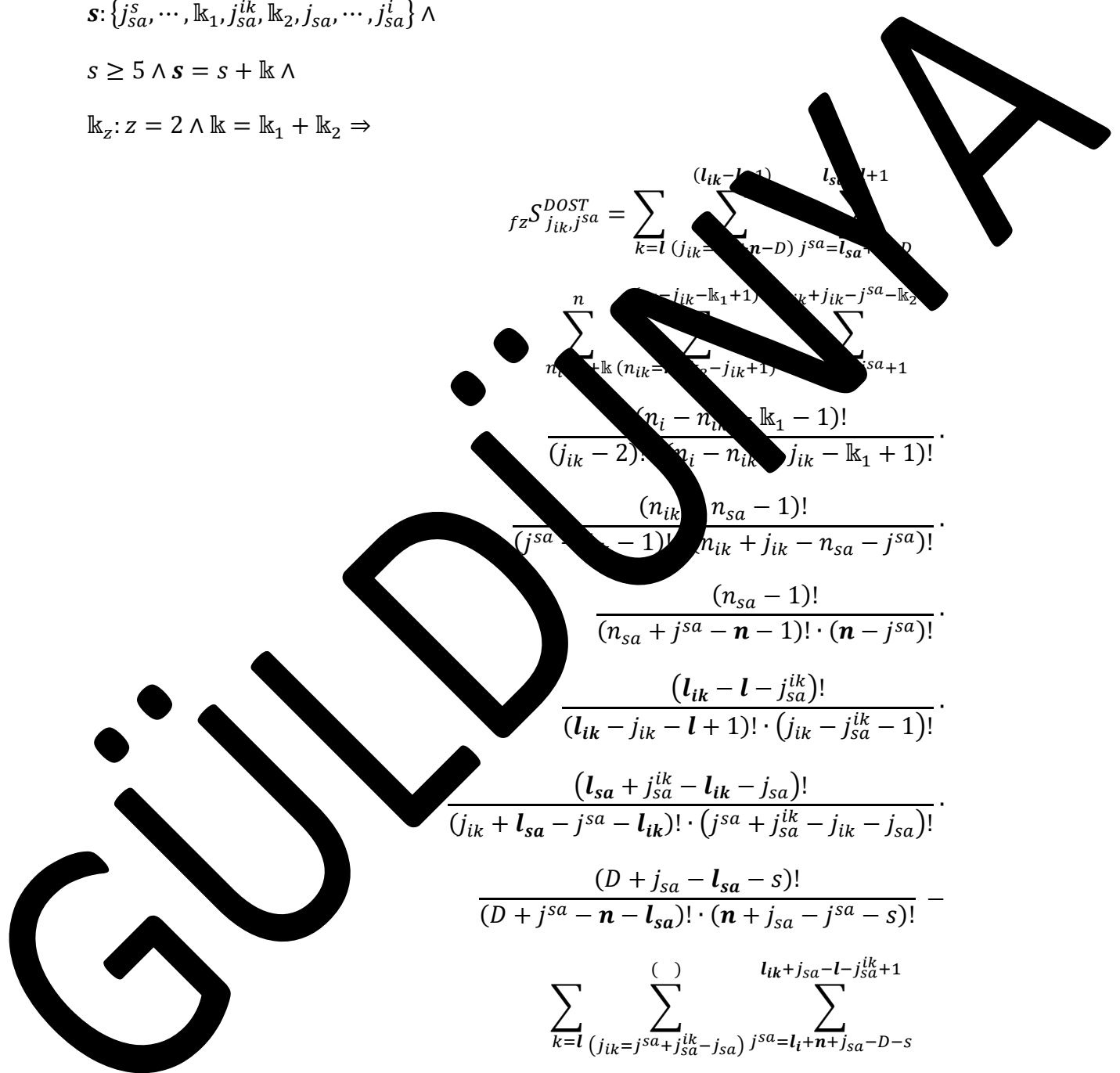
$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z^{S_{j_{ik}j_{sa}^{DOST}}} = \sum_{k=l}^{(l_{ik}-l+1)} \sum_{j_{sa}=l_{sa}^{l+1}}^{(l_{sa}^{l+1}-n+D)} \sum_{n_i=n+k}^n \sum_{n_{ik}=n_{ik}+j_{ik}-j_{sa}-k_2}^{(j_{ik}-k_1+1)} \sum_{n_{sa}=n_{sa}+1}^{(j_{sa}+1)} \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \frac{(n_{ik})! \cdot (n_{sa} - 1)!}{(j_{sa} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})} \sum_{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}^{(n_i-j_s+1)}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$



$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{\binom{()}{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - l)!}$$

$$\frac{(D - l_j)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$(l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik})) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} = 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^{l-1} \wedge j_{sa}^{ik} = j_{sa}^{l-1} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^s, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s \leq s + \mathbb{k} \wedge$$

$$z = 2 \cdot \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \left( \sum_{k=l} \sum_{\binom{(l_{ik}-l+1)}{j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa}}} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\begin{aligned}
& \sum_{n_i=n+\mathbb{k}}^n \sum_{\substack{(n_i-j_{ik}-\mathbb{k}_1+1) \\ (n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}} \sum_{\substack{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2 \\ n_{sa}=n-j^{sa}+1}} \\
& \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \left( \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j^{sa} - s)!} + \right. \\
& \left. \left( \sum_{k=l}^{n+l_{sa}-j^{sa}-1} \sum_{\substack{j_{ik}=n-D \\ (j_{ik}+n-D)}} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-l+1} \right) \right) \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{\substack{(n_i-j_{ik}-\mathbb{k}_1+1) \\ (n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}} \sum_{\substack{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2 \\ n_{sa}=n-j^{sa}+1}} \\
& \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \right)
\end{aligned}$$

$$\begin{aligned}
 & \sum_{k=l} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{lk}-D-j_{sa})}^{(l_{ik}-l+1)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{lk}+1)}^{l_{sa}-l+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \\
 & \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_i + j^{sa} - n - 1)! \cdot (n - j^{sa} - 1)!}{(n_i - j_{ik} - l_{k_1} + 1)! \cdot (j_{ik} - l_{k_1} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{ik} - l_{ik} - j_{sa})!}{(j_{ik} + j_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{lk} - j_{ik} - j_{sa})!} \cdot \\
 & \left( \frac{(D + j_{sa} - n_{sa} - s)!}{(D + j_{sa} - n - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) - \\
 & \sum_{k=l} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(l_{ik}-l+1)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}}^{(n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1})} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{(n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1})} \\
 & \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot l_k)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot l_k)! \cdot (n - s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

GÜLDÜZMAYA

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z^{DOST} = \sum_{k=l}^{\binom{j_{sa}^{ik} - j_{sa} - 1}{j_{sa}^{ik} - j_{sa} - 1}} \sum_{j_{sa}^{ik} = l_{sa} + n - D}^{\binom{j_{sa}^{ik} - j_{sa} - 1}{j_{sa}^{ik} - j_{sa} - 1}} \sum_{n_i = n + \mathbb{k}}^{\binom{n_i - j_{sa}^{ik} + 1}{n_i - n + \mathbb{k}_2 - j_{ik} + 1}} \sum_{n_{sa} = n - j_{sa} + 1}^{\binom{n_i - j_{sa}^{ik} + 1}{n_i - n + \mathbb{k}_2 - j_{ik} + 1}} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{sa} - j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} + \left( \sum_{k=l}^{\binom{j_{sa} + j_{sa}^{ik} - j_{sa} - 1}{j_{sa} + j_{sa}^{ik} - j_{sa} - 1}} \sum_{j_{sa}^{ik} = l_{sa} + n - D}^{\binom{l_s + j_{sa} - l}{j_{sa} + j_{sa}^{ik} - j_{sa} - 1}} \right)$$

$$\begin{aligned}
& \sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_{ik}-l_{k_1}+1) \\ (n_{ik}=n+l_{k_2}-j_{ik}+1)}} \sum_{\substack{n_{ik}+j_{ik}-j^{sa}-l_{k_2} \\ n_{sa}=n-j^{sa}+1}} \\
& \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=l}^{(l_s+1)-l} \sum_{\substack{j_{ik}=s+n+j_{sa}^{ik}-D-1 \\ j^{sa}=l_s+j_{sa}-l+1}} \\
& \sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_{ik}-l_{k_1}+1) \\ (n_{ik}=n+l_{k_2}-j_{ik}+1)}} \sum_{\substack{n_{ik}+j_{ik}-j^{sa}-l_{k_2} \\ n_{sa}=n-j^{sa}+1}} \\
& \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +
\end{aligned}$$

$$\begin{aligned}
 & \sum_{k=l} \sum_{(j_{ik}=l_s+n+j_{sa}^{ik}-D-1)}^{(l_s+j_{sa}^{ik}-l)} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-l+1} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
 & \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_i - n_{sa} - 1)!}{(n_i + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - j_{ik} - 1)!}{(l_{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - 1)!}{(j_{ik} + j_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \left( \frac{(D + j_{sa} - n - s)!}{(D + j_{sa} - n - s)! \cdot (n + j_{sa} - j^{sa} - s)!} \right) - \\
 & \sum_{k=l} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{( )} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_s+j_{sa}-l} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{( )} \\
 & \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n - s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

GÜLDENWA



$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 2 \leq l \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_{z^s}^{DOST} = \sum_{k=l}^{(l_s - j_{sa}^{ik} - l)} \sum_{(j_{ik} = n + j_{sa}^{ik} - D - l)}^{(l_s - l + 1)} \sum_{j_{sa} = l_{sa} + n - D}^{(n - j_{sa}^{ik} - \mathbb{k}_1 + 1)} \sum_{n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1}^{n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2} \sum_{n_{sa} = n - j_{sa} + 1}^{(n_i - n_{ik} - \mathbb{k}_1 - 1)!} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)}^{(l_s + j_{sa}^{ik} - l)} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k + j_{sa}^{ik} - (n_i - j_s + 1))}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - k_1}^{(\cdot)} \sum_{(n_{sa} = n_{ik} + j_{sa}^{ik} - k_2)}^{(\cdot)}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot k_1)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot k_1)! \cdot (n_{is} - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l - 1)!}{(D + j^{sa} + s - n - j_{sa}^{ik} - 1)! \cdot (j_{sa} - j^{sa} - s)!}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq l \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} - 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa} + 1 = l_s \wedge l_{ik} + j_{sa}^{ik} - j_{sa} > 0 \wedge$

$D \geq n < n \wedge l_{ik} > 0 \wedge$

$j_{sa} \leq j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa} < j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_s^i, \dots, j_{sa}^i\} \wedge$

$s \geq l_s = s + k_1 \wedge$

$k_z: z = 2 \wedge k_2 = k_1 + k_2 \Rightarrow$

$$f_z S_{j_{ik} j_{sa}}^{DOST} = \left( \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_{sa} + n + j_{sa}^{ik} - D - j_{sa})}^{(l_s + j_{sa}^{ik} - l)} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}} \right.$$

$$\left. \sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{ik} + j_{ik} - j_{sa} - k_2} \right)$$

$$\begin{aligned}
 & \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa})!}{(D + j^{sa} - n - l_{sa})! \cdot (D + j_{sa} - j_{sa} - l_{sa})!} + \\
 & \left( \sum_{l=1}^{(l_{sa} + n + j_{sa}^{ik} - D - j_{sa}^{ik})} \sum_{(j_{ik}=l_{sa} + n + j_{sa}^{ik} - D - l)}^{l_{sa} - l + 1} \sum_{n-D}^{n-D} \right) \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_{sa} - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 - 1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \\
 & \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{k=l} \sum_{(j_{ik}=l_{sa} + n + j_{sa}^{ik} - D - j_{sa})}^{(l_s + j_{sa}^{ik} - l)} \sum_{j^{sa}=j_{ik} + j_{sa} - j_{sa}^{ik} + 1}^{l_{sa} - l + 1}
 \end{aligned}$$

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$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_{ik}-l_{k_1}+1) \\ (n_{ik}=n+l_{k_2}-j_{ik}+1)}}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - 1)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - j_{sa})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} - l_{sa} - j_{sa})!}{(j_{ik} + j_{sa} - j_{sa} - l_{ik})! \cdot (j^{sa} - j_{sa}^{ik} - j_{sa})!} \cdot \\
 & \left( \frac{(D + j_{sa} - l_{sa} - s)!}{(n + j_{sa} - n - l_s)! \cdot (n + j_{sa} - j^{sa} - s)!} \right) \cdot \\
 & \sum_{k=l}^{(l_s+j_s-1)} \sum_{\substack{(j_{ik}-l_i+n+j_{sa}^{ik}-D-s) \\ j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}}^{(\quad)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{(\quad)} \\
 & \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot l_k)!}{(n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot l_k)! \cdot (n - s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 \geq l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$fz S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{\binom{l_{ik} + j_{sa} - l}{j_{sa} + j_{sa}^{ik} - j_{sa}}} \sum_{j_{sa} = l_{sa} + n - D}^{\binom{l_{ik} + j_{sa} - l}{j_{sa} + j_{sa}^{ik} - j_{sa}}} \sum_{n_i = n + k}^{\binom{n}{n_i = n + k_1}} \sum_{n_{sa} = n - j_{sa} + 1}^{\binom{n}{n_{sa} = n - j_{sa} + 1}} \frac{(n_{ik} - k_1 - 1)!}{(n_{ik} - 2)! \cdot (n_{ik} - j_{ik} - k_1 + 1)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} - j_{sa} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \sum_{k=l}^{\binom{l_{ik} + j_{sa} - l}{j_{sa} + j_{sa}^{ik} - j_{sa}}} \sum_{j_{sa} = l_i + n + j_{sa} - D - s}^{\binom{l_{ik} + j_{sa} - l}{j_{sa} + j_{sa}^{ik} - j_{sa}}} \sum_{n_i = n + k}^{\binom{n}{n_i = n + k}} \sum_{n_{sa} = n_{ik} + j_{ik} - j_{sa} - k_2}^{\binom{n_i - j_s + 1}{n_{sa} = n_{ik} + j_{ik} - j_{sa} - k_2}}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 \geq l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 =$$

$$j_{sa}^{DOST} = \sum_{j_{sa}^{ik}} \binom{()}{(j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa})} \sum_{j_{sa}^{sa} = l_{ik} + n + j_{sa} - D - j_{sa}^{ik}} \binom{l_{sa} - l + 1}{j_{sa}^{sa} = l_{ik} + n + j_{sa} - D - j_{sa}^{ik}}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l} \sum_{\binom{()}{j_{ik}=j_{sa}+j_{sa}^{lk}-j_{sa}}} \sum_{l_s+j_{sa}-l}^{j_{sa}=l_i+n+j_{sa}-D-s} \sum_{n_i=n+k}^n \sum_{\binom{(n_i-j_s+1)}{(n_{is}=n+k+j_{sa}^{lk}-j_{sa})}} \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{lk}-k_1} \sum_{\binom{()}{n_{sa}=n_{ik}+j_{sa}^{lk}-j_{sa}-k_2}} \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - s - j_{sa}^{lk} - k_1)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - n - 2 \cdot j_{sa} - 2 \cdot k)! \cdot (n_{is} - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{lk} - 1)!} \cdot \frac{(D - 1)!}{(D + j_{sa} + s - n - j_{sa})! \cdot (n_{is} + j_{sa} - j_{sa} - s)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{lk} + 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{lk} - j_{sa}$$

$$j_{ik} + j_{sa} - j_{sa}^{lk} \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{lk} + 1 \geq l \wedge l_{sa} + j_{sa}^{lk} - j_{sa} = l_{ik} \wedge$$

$$D \geq n < n \wedge I = k_1 = 0 \wedge$$

$$j_{sa} \leq j_{sa} - 1 \wedge j_{sa}^{lk} = j_{sa} - 1 \wedge j_{sa}^{lk} - j_{sa}^{lk} - 1 \wedge$$

$$s: \{j_{sa}^{lk}, \dots, k_1, j_{sa}^{lk}, k_2, \dots, j_{sa}^{lk}\} \wedge$$

$$s \geq 5 \wedge s \leq s + k_1 \wedge$$

$$k_2: z \geq 2 \wedge k_2 = k_2 \Rightarrow$$

$$f_z^{S_{j_{ik}, j_{sa}^{lk}}^{DOST}} = \sum_{k=l} \sum_{\binom{(l_{ik}-l+1)}{(j_{ik}=l_{sa}+n+j_{sa}^{lk}-D-j_{sa})}} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{lk}} \sum_{n_i=n+k}^n \sum_{\binom{(n_i-j_{ik}-k_1+1)}{(n_{ik}=n+k_2-j_{ik}+1)}} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-k_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + j_{sa} - l_{sa})!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa})!}$$

$$\sum_{(j_{ik}=l_i+\dots)}^{(l_s+j_{sa}^{ik}-l)}$$

$$\sum_{=n+\mathbb{k}}^{(n_i-j_s+1)} \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}$$

$$\sum_{\mathbb{k}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1}^{(\dots)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(2 \cdot n_{is} + \dots + j_{sa}^s - l_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot j_{ik} + j_{sa}^s - \dots - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D > n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{sa} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 \geq l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$



$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z S_{j_{ik} j_{sa}}^{DOST} = \sum_{k=l}^{(l_{sa} + j_{sa}^{ik} - l - j_{sa} + 1)} \sum_{(j_{ik} = l_{ik} + n - D)} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{(n_{sa} = n - j_{sa} - k_2 + 1)}^{(n_{ik} + j_{sa} - j_{sa}^{ik} - k_2)}$$

$$\frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \frac{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j_{sa})!}{(n_{sa} - j_{sa} - n - 1)! \cdot (n - j_{sa})!}$$

$$\frac{(n - l - j_{sa}^{ik})!}{(n_{sa} - j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(n_i - j_{ik} - k_1 + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}{(D + j_{sa} - l_{sa} - s)! \cdot (n + j_{sa} - j_{sa} - s)!}$$

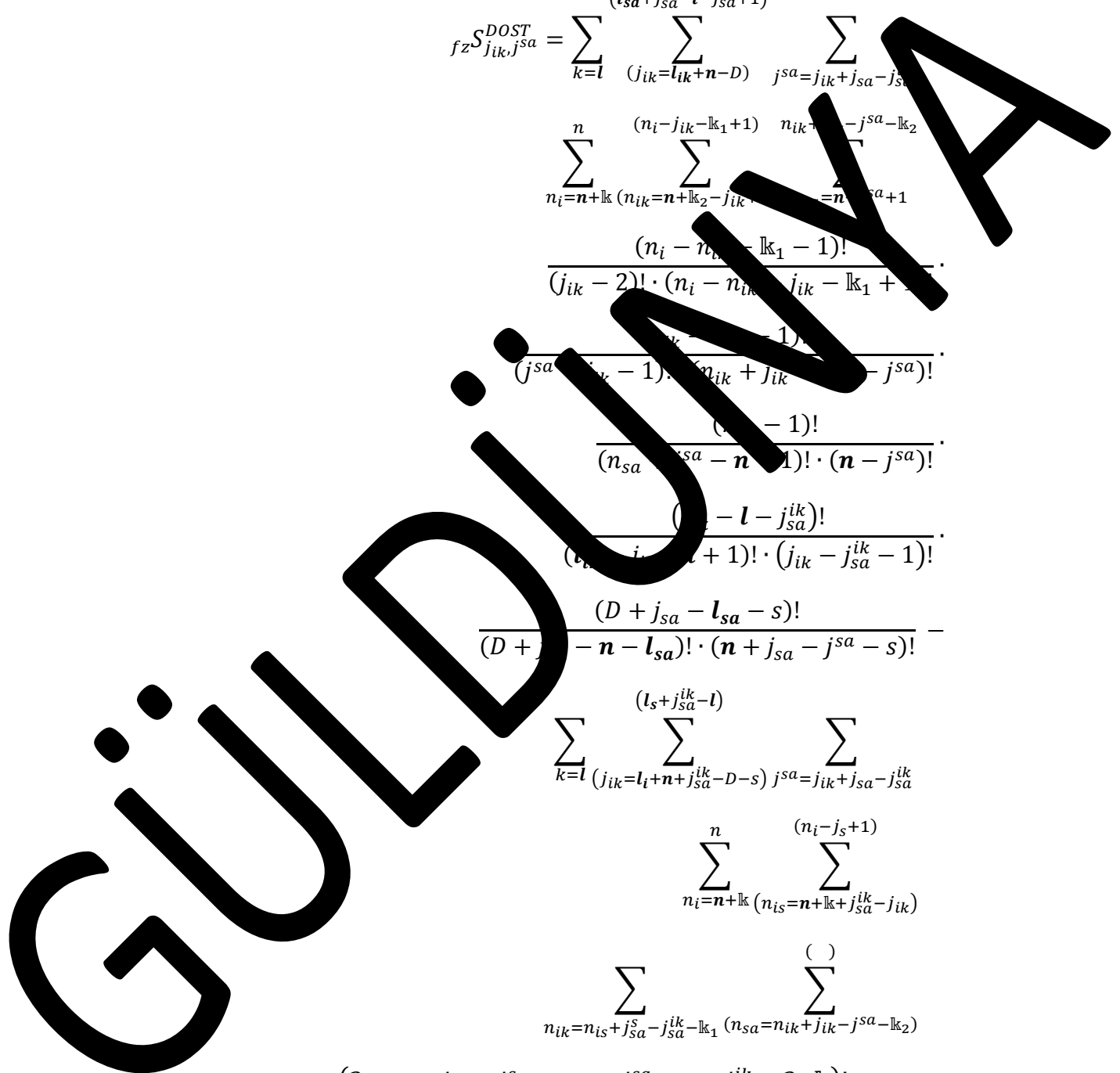
$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - k_1}^{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - k_2)}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - s - j_{sa}^{ik} - 2 \cdot k)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot k)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$



$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$\begin{aligned} & \sum_{j_{ik}, j_{sa}^{ik}}^{DO.S} \sum_{j_{ik}=l_s+n+j_{sa}^{ik}-1}^{(j_{sa}^{ik}-j_{sa})} \sum_{j_{sa}^{ik}=l_i+n+j_{sa}-D-s}^{l_s+j_{sa}-l} \\ & \sum_{n+k}^{(n_i-n-k_1+1)} \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{n_{ik}+j_{ik}-j_{sa}-k_2} \sum_{n_{sa}=n-j_{sa}+1} \\ & \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \\ & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\ & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\ & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\ & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\ & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \end{aligned}$$

GÜLDENMYA

$$\begin{aligned}
 & \sum_{k=l} \sum_{(j_{ik}=l_s+n+j_{sa}^{ik}-D-1)}^{(l_s+j_{sa}^{ik}-l)} \sum_{j^{sa}=l_s+j_{sa}-l+1}^{l_i+j_{sa}-l-s+1} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
 & \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_i - j^{sa} - n - 1)!}{(n_i + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - j_{ik} - 1)!}{(l_{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - 1)!}{(j_{ik} + j_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \\
 & \sum_{k=l} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{( )} \sum_{j^{sa}=l_{sa}+n-D}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{( )} \\
 & \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n - s)!} \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

GÜLDÜZMAYA

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z^{DOST} j_{sa}^{ik} = \sum_{k=l}^{(l_i+n+...-D)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(l_i+j_{sa}-l-s+1)} j^{sa=l_i+n+j_{sa}-D-s}$$

$$\sum_{n_{ik}+k}^n \sum_{(n_{ik}=n_{ik}-j_{ik}+1)}^{(n_{ik}-k-k_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-k_2}$$

$$\frac{(n_i - n_{ik} - k_1 - 1)!}{(n_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(n_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l}^{(l_s+j_{sa}^{ik}-l)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{l_i+j_{sa}-l-s+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

GÜLDENKYA

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - 1)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - j_{sa})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} - l_{sa} - j_{sa})!}{(j_{ik} + j_{sa} - j_{sa} - l_{ik})! \cdot (j^{sa} - j_{sa}^{ik} - j_{sa})!} \cdot \\
 & \frac{(n + j_{sa} - n - s)!}{(n + j_{sa} - n - 1)! \cdot (n - j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{l=1}^{(l_{ik}-l)} \sum_{j_{sa}^{ik}=j_{sa}^{ik}-D-j_{sa}}^{j_{sa}^{ik}-D-j_{sa}} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}}^{( )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{( )} \\
 & \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot l_k)!}{(2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot l_k)! \cdot (n - s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$j_{ik, j_{sa}}^{ST} = \sum_{k=l} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(j_{sa}=l_{sa}+n-D)}^{l_{sa}-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$



$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z \mathcal{S}_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{sa} + j_{sa}^{ik} - l - j_{sa} + 1)} \sum_{(j_{ik} = l_{sa} + n + j_{sa}^{ik} - D - j_{sa})} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{sa} + 1)} \sum_{(n_{sa} = n - j_{sa}^{ik} - \mathbb{k}_2)}$$

$$\frac{(n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - j_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j_{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - \mathbb{k}_1} \sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)}^{(\quad)}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n - s)!}$$



$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z \geq 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$j_{ik, j_{sa}}^{ST} = \sum_{k=l} \sum_{\binom{()}{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}} \sum_{\binom{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}{j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}}$$

$$\sum_{n_i=n+k}^n \sum_{\binom{(n_i-j_{ik}-k_1+1)}{(n_{ik}=n+k_2-j_{ik}+1)}} \sum_{\binom{n_{ik}+j_{ik}-j^{sa}-k_2}{n_{sa}=n-j^{sa}+1}}$$

$$\frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{()} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{l_s+j_{sa}-l} j^{sa=l_i+n+j_{sa}-D-s}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_i+l_{sa}-j_{ik})}^{(n_i+l_{sa}+1)}$$

$$\sum_{n_{ik}=n_i+j_{sa}-j_{sa}^{ik}-\mathbb{k}_2}^{()} \sum_{(j_{sa}-\mathbb{k}_2)}$$

$$\frac{(2 \cdot n_{is} + j_{ik}^s - j_{sa}^s - n_{sa} + j^{sa} - j_{sa}^{ik} - 2 \cdot \mathbb{k})}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - 2 \cdot j_{sa}^s - 2 \cdot \mathbb{k})! \cdot (n - s)!}$$

$$\frac{(j_{sa} - l - 1)!}{(j_{sa} - j_{sa}^{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l_s = D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_{ik}+n-D)} j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik}=l_i + n + j_{sa}^{ik} - D - s)} j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{()}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j_{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz^{DOS} j_{ik,j}^{sa} = \sum_{k=l}^{j_{sa}^{ik}-j_{sa}} \sum_{(j_{ik}=l_{ik}+n-D)}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{n_{ik}+j_{sa}-l-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\begin{aligned}
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_{ik}+n-D)}^{l_i+j_{sa}-l-s+1} \sum_{j^{sa}=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_k-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_s=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}} \\
& \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - l_{k_1} - 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} + j_{sa} - n - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (j^{sa})!} \cdot \\
& \frac{(l_{ik} - j_{sa} - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + j_{sa} - j_{sa}^{ik} - j_{sa})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} - \\
& \sum_{k=l}^{( )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{l_s+j_{sa}-l} \sum_{j^{sa}=l_{sa}+n-D} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}}^{( )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{( )} \\
& \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot l_k)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot l_k)! \cdot (n - s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
\end{aligned}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz^S j_{ik} \sum_{k=l}^{(l_i+n+j_{sa}^{ik}-D-s-1)} \sum_{(j_{ik}=l_{ik}+n-D)}^{l_i+j_{sa}-l-s+1} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} +$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{l_i+j_{sa}-l-s+1} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_k-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{(n_{sa}=n+l_k-j_{sa}+1)}^{n_{ik}+j_{sa}-j_{sa}^{ik}-l_{k_2}}$$

$$\frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - l_{k_1} - 1)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot$$

$$\frac{(n_{sa} - l_{k_2} - 1)!}{(j_{sa} - l_{k_2} - 1)! \cdot (n_{sa} + j_{sa} - j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} -$$

$$\sum_{k=l}^{(l_s+j_{sa}^{ik}-l)} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})}^{(l_s+j_{sa}^{ik}-l)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-l_{k_2})}^{( )}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - s - j_{sa}^{ik} - 2 \cdot l_k)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot l_k)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa})) \wedge$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa} \leq j_{sa}^i \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$\{j_{sa}^s, \dots, j_{sa}^{i-1}, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$



$$\begin{aligned}
f_{z^S} S_{j_{ik}, j^{sa}}^{DOST} &= \sum_{k=l}^{(j^{sa} + j_{sa}^{ik} - j_{sa})} \sum_{(j_{ik} = l_{ik} + n - D)} \sum_{j^{sa} = l_{sa} + n - D}^{l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1} \\
&\sum_{n_i = n + l_k}^n \sum_{(n_{ik} = n + l_{k_2} - j_{ik} + 1)}^{(n_i - j_{ik} - l_{k_1} + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - l_{k_2}} \\
&\frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
&\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
&\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
&\frac{(l_{ik} - l - j_{sa}^{ik})!}{(n_i - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
&\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
&\frac{(D + j_{sa}^{ik} - l_{sa} - s)!}{(D + j_{sa}^{ik} - l_{sa} - s)! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
&\sum_{k=l}^{(l_{ik} - l + 1)} \sum_{(j_{ik} = l_{ik} + n - D)}^{l_{ik} - l + 1} \sum_{j^{sa} = l_{ik} + j_{sa} - l - j_{sa}^{ik} + 2}^{l_{sa} - l + 1} \\
&\sum_{n_i = n + l_k}^n \sum_{(n_{ik} = n + l_{k_2} - j_{ik} + 1)}^{(n_i - j_{ik} - l_{k_1} + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - l_{k_2}} \\
&\frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
&\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
&\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
&\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
\end{aligned}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{( )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{l_s+j_{sa}-l}^{( )} j^{sa=l_i+n+j_{sa}-D-s}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_i+l_k+1)}^{(n_i+l_k+1)} \sum_{(n_i+l_k-j_{ik})}$$

$$\sum_{n_{ik}=n_i+j_{sa}^{ik}-l_{ik}}^{( )} \sum_{(n_{ik}-j^{sa}-l_{k_2})}$$

$$\frac{(2 \cdot n_{is} + j_{ik} - j_{sa}^s - n_{sa} + j^{sa} - j_{sa}^{ik} - 2 \cdot l_k)}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - 2 \cdot j_{sa}^{ik} - 2 \cdot l_k)! \cdot (n - s)!}$$

$$\frac{(j_{sa} - l - 1)!}{(j_{sa} - j_{sa}^{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + \dots - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_{z_{sa}^{POST}} = \sum_{k=l}^{n+j_{sa}^{ik}-j_{sa}-1} \sum_{j_{ik}=k+n-D}^{l_{sa}-l+1} \sum_{j^{sa}=l_{sa}+n-D}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\begin{aligned}
& \sum_{k=l} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})}^{(l_{ik}-l+1)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{l_{sa}-l+1} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{(n_{sa}=n-j_{sa}^{ik})}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \\
& \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_i + j^{sa} - n - 1)! \cdot (n - j^{sa})!}{(n_i - j_{ik} - l_{k_1} + 1)! \cdot (j_{ik} - l_{k_1} - 1)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + j_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - l_{sa} - s)! \cdot (n + j_{sa} - j^{sa} - s)!} \\
& \sum_{k=l} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(l_s+j_{sa}^{ik}-l)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{(\quad)} \\
& \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot l_k)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot l_k)! \cdot (n - s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
\end{aligned}$$



$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{\binom{()}{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}} \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - l)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j^s < j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned} j_{ik, j_{sa}}^{OST} &= \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik}=l_s + n + j_{sa}^{ik} - D - 1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \\ &\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\ &\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \end{aligned}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{(l_{sa} + j_{sa}^{ik} - l - j_{sa} + 1)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)} \sum_{j_{sa} = j_{sa} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n: n+k}^n \sum_{(n_{is} = n - j_{ik})}^{(n_{is} + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^{ik} - k_1}^{( )} \sum_{(n_{ik} = j_{sa} - k_2)}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - s - j_{sa}^{ik} - 2 \cdot k)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - s - j_{sa}^{ik} - 2 \cdot k)! \cdot (n - s)!}$$

$$\frac{(D - l - 1)!}{(D + j_{sa} - l - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j_{sa} + l_i - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{ik} + 1 \leq j_{ik} < j_{sa} + j_{sa} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - l \wedge$$

$$l_{ik} - j_{sa} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge k >$$

$$j_{sa} - j_{sa} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq s \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{( )} \sum_{(j_{ik} = j_{sa} + j_{sa}^{ik} - j_{sa})} \sum_{j_{sa} = l_i + n + j_{sa} - D - s}^{l_i + j_{sa} - l - s + 1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - 1)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_i - l - j_{sa})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_s - l - j_{sa} - s)!}{(l_s + j_{sa} - n - 1)! \cdot (n - j^{sa} - s)!}$$

$$\sum_{k=l}^{( )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{( )} \sum_{j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}^{l_s+j_{sa}-l}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1}^{( )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{( )}$$

$$\frac{(2 \cdot j_{ik} + 2 \cdot j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot j_{ik} + 2 \cdot j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$l_s \wedge l_i > D - n + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$



$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_i + j_{sa}^{ik} - l - s + 1)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - l - s + 1)} \sum_{(j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})} \dots$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_i - j_{ik} + 1)}^{(n_i - j_{ik} + 1)} \sum_{(n_{ik} = n_{ik} - j_{ik} + 1)}^{(n_{ik} + j_{ik} - \mathbb{k}_2)} \dots$$

$$\frac{(n_{ik} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}{(j_{ik} - 2)! \cdot (n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \dots$$

$$\frac{(n_{sa} - 1)!}{(j_{sa} - n_{sa} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \dots$$

$$\frac{(n_{sa} - 1)!}{(j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \dots$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \dots$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \cdot \dots$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_{ik} + n - D)} \sum_{(j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})} \dots$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)} \dots$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - \mathbb{k}_1} \sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)}^{(\dots)}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z \geq 2 \wedge \mathbb{k} = \mathbb{k}_1 \vee \mathbb{k}_2 \Rightarrow$$

$$f_Z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(j^{sa} + j_{sa}^{ik} - j_{sa})} \sum_{(j_{ik} = l_s + n + j_{sa}^{ik} - D - 1)}^{l_s + j_{sa} - l} \sum_{j^{sa} = l_{sa} + n - D}^{l_s + j_{sa} - l}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\begin{aligned}
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{(l_s + j_{sa}^{ik} - l) - l + 1} \sum_{(j_{ik} = l_s + n + j_{sa}^{ik} - D) - l + 1}^{(j_{ik} = l_s + n + j_{sa}^{ik} - D) - l + 1} \sum_{(j_{sa} = l_s + n + j_{sa}^{ik} - D) - l + 1}^{(j_{sa} = l_s + n + j_{sa}^{ik} - D) - l + 1} \\
 & \sum_{n_i = n + k_1}^n \sum_{(n_i - j_{ik} - k_1) - j_{ik} + 1}^{(n_i - j_{ik} - k_1) - j_{ik} + 1} \sum_{(n_{ik} + j_{ik} - k_2) - n - j^{sa} + 1}^{(n_{ik} + j_{ik} - k_2) - n - j^{sa} + 1} \\
 & \frac{(n_{ik} - n_{ik} - k_1)!}{(j_{ik} - k_1)! \cdot (n_{ik} - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \\
 & \frac{(n_{sa} - n_{sa} - 1)!}{(n_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{( )} \sum_{(j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa})}^{l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1} \sum_{j^{sa} = l_i + n + j_{sa} - D - s}^{l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1} \\
 & \sum_{n_i = n + k_1}^n \sum_{(n_{is} = n + k_1 + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)} \\
 & \sum_{n_{ik} = n_{is} + j_{sa}^{ik} - j_{sa} - k_1}^{( )} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - k_2)}^{( )}
 \end{aligned}$$

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$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa})) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{ik} < j_{sa}^{ik} - 1$$

$$s: \{j_s^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, j_{sa}^i, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = j_{sa} - \mathbb{k} \wedge$$

$$\mathbb{k}_2 = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz_{j_{ik} j_{sa}}^{DOST} = \sum_{k=l}^{(l_{sa} + n + j_{sa}^{ik} - D - j_{sa} - 1)} \sum_{(j_{ik} = l_s + n + j_{sa}^{ik} - D - 1)}^{l_{sa} - l + 1} \sum_{j_{sa} = l_{sa} + n - D}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{j_{ik}=l_{sa} + n + j_{sa}^{ik} - D - j_{sa}}^{j_{ik} - l_{sa} - 1} \sum_{j_{sa}=j_{ik} + j_{sa} - j_{sa}}^{j_{sa} - j_{ik} - 1}$$

$$\sum_{n_i=n+l_k}^n \sum_{n_{ik}=n+l_k+j_{sa}^{ik}-j_{ik}+1}^{j_{ik}-l_{sa}-1} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{sa}-j_{sa}-l_k-2}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j_{ik} - 2)! \cdot (n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot$$

$$\frac{(n_{sa} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - j_{sa})! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot$$

$$\sum_{k=l}^{(l_{ik} - l + 1)} \sum_{j_{ik}=l_i + n + j_{sa}^{ik} - D - s}^{j_{ik} - l_i - 1} \sum_{j_{sa}=j_{ik} + j_{sa} - j_{sa}}^{j_{sa} - j_{ik} - 1}$$

$$\sum_{n_i=n+l_k}^n \sum_{n_{is}=n+l_k+j_{sa}^{ik}-j_{ik}}^{(n_i - j_s + 1)}$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{\binom{()}{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_j)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$

$l_{sa} \leq D + j_{sa} - n \wedge l_i \leq D + s - n \wedge$

$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^{ik} = j_{sa} \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^l\} \wedge$

$s \geq 5 \wedge s = s + \mathbb{k}$

$\mathbb{k} \cdot z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{sa}+1} \frac{(j^{sa}+j_{sa}^{ik}-j_{sa}) \cdot l_s + j_{sa} - l}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + j_{sa} - l + 1)}^{(n - j_{ik} - 1)} \sum_{(n_{ik} + j_{ik} - j_{sa} - l + 1)}^{(n - j_{sa} + 1)} \frac{(n_{ik} - n_{ik} - l_{k_1})!}{(j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(n_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{( )} \sum_{(j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa})}^{l_s + j_{sa} - l} \sum_{j_{sa} = j_{sa} + 1} \sum_{n_i = n + l_k}^n \sum_{(n_{is} = n + l_k + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - l_{k_1}} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - l_{k_2})}^{( )}$$

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$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa})!}$$

$$D \geq n < n \wedge l \neq i \wedge l_{sa} \leq D + j_{sa} - n \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2$$

$$S_{j_{ik}, j_{sa}}^{DOST} = \left( \sum_{k=l} \binom{()}{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{j^{sa}=j_{sa}+1}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \right)$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$



$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\left( \sum_{k=l}^{j^{sa} + j_{sa}^{ik} - j_{sa} - 1} \sum_{(j_{ik} = j_{sa}^{ik} + 1)} \sum_{j^{sa} = j_{sa} + 2} \right)$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l_{sa} - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - j_{sa}^{ik} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(j_{ik} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (l_{ik} - j_{sa})!}{(j_{ik} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l}^{(l_{ik} - l + 1)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)} \sum_{j^{sa} = l_{ik} + j_{sa} - l - j_{sa}^{ik} + 2}^{l_{sa} - l + 1}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{( )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(l_{ik}+j_{sa}^{ik}-l-j_{sa}^{ik}+1)} \sum_{(j_{sa}=j_{sa}^{ik}+1)}^{(n_i-j_{sa}^{ik})}$$

$$\sum_{(n+l_{ik}(n_{is}+l_{ik}+j_{sa}^{ik}-j_{ik}))}^{(n_i-j_{sa}^{ik})} \sum_{(n_{ik}=n_{is}+j_{sa}^{ik}-l_{ik_1}(n_{is}+l_{ik}+j_{sa}^{ik}-j_{ik}-j^{sa}-l_{ik_2}))}^{(n_i-j_{sa}^{ik})}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^{ik} - n_{sa} - j^{sa} - j_{sa}^{ik} - 2 \cdot l_{ik})!}{(2 \cdot n_{is} + 2 \cdot j_{sa}^{ik} + n_{sa} - j^{sa} - n - j_{sa}^{ik} - 2 \cdot l_{ik})! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j_{sa}^{ik} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$D \geq n < n \wedge l \neq l \wedge l_s \leq n - 1 \wedge$

$j_{sa}^{ik} \leq j_{sa} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j_{sa}^{ik} \leq n + j_{sa} - s \wedge$

$l_{ik} + j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$

$l_{sa} \leq D + j_{sa}^{ik} - n \wedge$

$l_{sa} \leq n \wedge I = l_{ik} > 0 \wedge$

$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, l_{k_2}, j_{sa}, \dots, j_{sa}^l\} \wedge$

$s \geq 5 \wedge s = s + l_{k_1} \wedge$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z^{S_{j_{ik}, j^{sa}}} = \left( \sum_{k=l}^n \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(j^{sa}=j_{sa}+1)} \frac{\binom{l_s+j_{sa}-l}{j^{sa}=j_{sa}+1}}{\binom{n_i-j_{ik}-\mathbb{k}_1+1}{n_{ik}=n+\mathbb{k}_2-j_{ik}+1} \binom{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}{n_{sa}=n-j^{sa}+1}} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) +$$

$$\left( \sum_{k=l}^n \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{(j^{sa}=j_{sa}+2)} \frac{\binom{l_s+j_{sa}-l}{j^{sa}=j_{sa}+2}}{\binom{n_i-j_{ik}-\mathbb{k}_1+1}{n_{ik}=n+\mathbb{k}_2-j_{ik}+1} \binom{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}{n_{sa}=n-j^{sa}+1}} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \right)$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{sa} - l + 1} \sum_{j^{sa} = l_s + j_{sa} - l + 1}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa}}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (j^{sa})!} \cdot$$

$$\frac{(l_{ik} - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + j_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\left( \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) -$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{sa} - l + 1} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - \mathbb{k}_1}^{( )} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n - s)!} \cdot$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_{sa} \leq D + j_{sa} - n \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$j_{ik, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{ik}-1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(l_{ik}-1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{(l_{ik}-1)}$$

$$\sum_{n+l}^{(n_i-n_{ik}-k_1+1)} \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-n_{ik}-k_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-k_2}$$

$$\frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) +$$

$$\left( \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(l_{ik}-l+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{l_{sa}-l+1} \right)$$

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$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - n \wedge$$

$$D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z^{DOST} = \left( \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}^{l_{sa} - l + 1} \sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 - 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - k_2} \frac{(n_i - j_{ik} - k_1 - 1)!}{(j_{ik} - j_{sa} - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \left( \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{sa} - l + 1} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik} + 1}^{l_{sa} - l + 1} \sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - k_2} \dots \right)$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa}^{ik})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - l_{sa})!} \cdot \frac{(D + j^{sa} - l_{sa} - j_{sa}^{ik} - j_{ik} - j^{sa} - s)!}{(D + j^{sa} - n - j_{sa}^{ik} - j_{ik} - j^{sa} - s)!} \cdot \sum_{k=j_{sa}^{ik}+1}^{n} \sum_{l_{sa}^{ik}=j_{sa}^{ik}+1}^{n} \sum_{a=j_{ik}+j_{sa}^{ik}-j_{sa}^{ik}}^{n} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{(n_{is} + j_{sa}^s + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot j_{sa}^s - 2 \cdot j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

- $l \neq i \wedge l \neq s \wedge l \neq j_{sa}^{ik} \wedge l \neq j_{ik} \wedge l \neq j^{sa} \wedge l \neq n - n + 1 \wedge$
- $j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$
- $j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$
- $l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$



$$l_{sa} \leq D + j_{sa} - n \wedge l_i \leq D + s - n \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z^{S_{j_{ik}, j_{sa}^{sa}}} = \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{sa} + 1} \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k} + j_{sa}^{ik} - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{(j_{sa} = j_{sa} + 1)}^{(n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik})! \cdot (n_{sa} - 1)!}{(j_{sa}^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{sa} + 1} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{\binom{()}{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}} \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_j)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$

$2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$

$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$

$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge s < j_{sa}^{ik} - 1$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 5 \wedge s = j_{sa} - \mathbb{k} \wedge$

$\mathbb{k}_2 = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_z S_{j_{ik} j_{sa}}^{DOST} = \left( \sum_{k=l} \sum_{\binom{()}{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}} \sum_{j^{sa}=l_{sa}+n-D}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{\binom{()}{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \right)$$

$$\begin{aligned}
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \left( \sum_{k=l}^{(j^{sa} + j_{sa}^{ik} - j_{sa} - 1)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1} \sum_{j_{sa} = l_{sa} - n - D}^{n - D} \right) \cdot \\
 & \sum_{n_i = n + \mathbb{k}_1}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \\
 & \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{k=l}^{(l_{ik} - l + 1)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{sa} - l + 1} \sum_{j_{sa} = l_{sa} - n - D}^{l_{sa} - l + 1} \\
 & \sum_{n_i = n + \mathbb{k}_1}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \\
 & \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
 \end{aligned}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (D + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=0}^{j_{sa} - l - j_{sa}^{ik} + 1} \binom{j_{sa} - l - j_{sa}^{ik} + 1}{k} (j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}) j^{sa} - D - s$$

$$\sum_{k=0}^{n} \sum_{l=k}^{(n - j_s + 1)} (n_{is} = n + k + j_{sa}^{ik} - j_{ik})$$

$$\sum_{k=0}^{n_{is} + j_{sa}^s - j_{sa}^{ik} - k_1} \binom{n_{sa} = n_{ik} + j_{ik} - j^{sa} - k_2}{k}$$

$$\frac{(2 \cdot n_{is} + j_{sa}^s + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot k)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot k)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D + n - l_i \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$D + l_{ik} + j_{sa}^{ik} - n - l_{sa} - j_{sa}^{ik} + 2 \leq l \leq i - 1 \wedge$$

$$j_{sa}^{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_Z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(l_{ik}-l+1)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{(l_{ik}-l+1)} \sum_{n_i=n+\mathbb{k}_1}^n \sum_{n_{is}=n+\mathbb{k}_2}^{(n_i-j_{is}+1)} \sum_{n_{sa}=n-j_{sa}+1}^{(n_{ik}+j_{ik}-\mathbb{k}_2)} \frac{(n_{ik}-n_{ik}+1)! \cdot (n_{ik}-j_{ik}-\mathbb{k}_1+1)! \cdot (n_{ik}-n_{sa}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j_{sa})! \cdot (n_{sa}-1)! \cdot (j_{sa}-n-1)! \cdot (n-j_{sa})!}{(j_{ik}-2)! \cdot (n_{ik}-n_{ik}-j_{ik}-\mathbb{k}_1+1)! \cdot (n_{ik}-n_{sa}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j_{sa})! \cdot (n_{sa}-1)! \cdot (j_{sa}-n-1)! \cdot (n-j_{sa})!} \cdot \frac{(l_{ik}-l-j_{sa}^{ik})!}{(l_{ik}-j_{ik}-l+1)! \cdot (j_{ik}-j_{sa}^{ik}-1)!} \cdot \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(l_{sa}+l_{sa}-j_{sa}-l_{ik})! \cdot (j_{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot \frac{(D+j_{sa}-l_{sa}-s)!}{(D+j_{sa}-n-l_{sa})! \cdot (n+j_{sa}-j_{sa}-s)!}$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(l_{ik}-l+1)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}_1}^n \sum_{n_{is}=n+\mathbb{k}_2}^{(n_i-j_{is}+1)} \sum_{n_{sa}=n-j_{sa}+1}^{(n_{ik}+j_{ik}-\mathbb{k}_2)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik}$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$S_{j_{ik}, j_{sa}}^{DOST} = \left( \sum_{k=l} \sum_{\binom{()}{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}} \sum_{j^{sa}=l_{sa}+n-D}^{l_s+j_{sa}-l} \right.$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{\binom{(n_i-j_{ik}-\mathbb{k}_1+1)}{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{sa}+j_{sa}-1}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\begin{aligned}
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \\
& \left( \sum_{k=l}^{(j^{sa} + j_{sa}^{ik} - j_{sa} - 1)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_s + j_{sa} - l} \sum_{j^{sa} = l_{sa} + n - D}^{n_{ik} + j_{ik} - j^{sa} - l_{k_2}} \right. \\
& \sum_{n_i = n + l_{k_1}}^n \sum_{(n_{ik} = n + l_{k_2} - j_{ik} + 1)}^{(n_i - j_{ik} - l_{k_1} + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - l_{k_2}} \\
& \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - n_{ik} - l_{k_1} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \\
& \left. + \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \right) + \\
& \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \\
& \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{sa} - l + 1} \sum_{j^{sa} = l_{sa} + n - D}^{n_{ik} + j_{ik} - j^{sa} - l_{k_2}} \\
& \sum_{n_i = n + l_{k_1}}^n \sum_{(n_{ik} = n + l_{k_2} - j_{ik} + 1)}^{(n_i - j_{ik} - l_{k_1} + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - l_{k_2}} \\
& \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}
\end{aligned}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \left( \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) \cdot \sum_{k=l}^{( )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(l_i+n+j_{sa}-D)} \sum_{(n_{is}+l_{ik}+j_{sa}^{ik}-j_{sa}-j_{sa}^{s+1})} \sum_{(n_{is}+l_{ik}+j_{sa}^{ik}-j_{sa}-j_{sa}^{s+1})} \sum_{(n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{ik}-1)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k2})} \frac{(n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot l_{k})!}{(2 \cdot n_{is} + 2 \cdot j_{sa}^s + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot l_{k})! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\begin{aligned} & \geq n < n \wedge l \neq i l \wedge l \leq D - n + 1 \wedge \\ & D + l_{sa} + j_{sa} - n_{sa} - j_{sa}^{ik} + 2 \leq l \leq i l - 1 \wedge \\ & j_{sa}^{ik} \leq j_{ik} - j_{sa}^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge \\ & j_{sa}^{ik} + j_{sa}^{sa} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge \\ & D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge \\ & D \geq n < n \wedge l = l_{k} > 0 \wedge \\ & j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge \end{aligned}$$



$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z S_{j_{ik} j_{sa}}^{DOST} = \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{sa} - l + 1} \sum_{j_{sa} = l_{sa} + n}^{n} \sum_{n_i = n + k}^{(n_i - j_{ik} - k_1 + 1)} \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{n_{ik} + j_{sa} - k_2} \sum_{(n_{sa} = n - j_{sa} + 1)}^{n_{sa} - j_{sa} + 1} \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \frac{(n_{ik} - 1)!}{(j_{sa}^{ik} - k_1 - 1)! \cdot (n_{ik} + j_{ik} - j_{sa}^{ik})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} - j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(n - l - j_{sa}^{ik})!}{(n_{sa} - l - j_{sa}^{ik} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)}^{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}} \sum_{n_i = n + k}^n \sum_{(n_{is} = n + k + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - k_1} \sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - k_2)}^{( )}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - s - j_{sa}^{ik} - 2 \cdot k)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot k)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i_l \wedge l_s \leq D - n + 1 \wedge$$

$$2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2$$

$$fz S_{j_{ik}^{sa}} = \binom{l_{ik} - l + 1}{l} \sum_{j_{ik} = l_{sa} + n + j_{sa}^{ik} - D - j_{sa}}^{l_{ik} - l + 1} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\left( \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) +$$

$$\left( \sum_{k=l}^{l_{sa}+n+j_{sa}^{ik}-D-j_{sa}-1} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_{sa}-l+1} \sum_{j^{sa}=l_{sa}+n-D}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}}$$

$$\frac{(n_i - n_{ik} - l_{k1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k1} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l_{sa}^{ik})!}{(l_{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(j_{ik} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\left( \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) +$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})}^{l_{sa}-l+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k2}}$$

$$\frac{(n_i - n_{ik} - l_{k1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k1} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

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$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D) \wedge (j_{sa}^{ik}=j_{ik}-j_{sa}^{ik})}$$

$$\sum_{(n+l_k) \wedge (n_{is}+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_{sa}^{ik})}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-l_{k_1} \wedge (n_{ik}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^{ik} - n_{sa} - j^{sa} - j_{sa}^{ik} - 2 \cdot l_k)!}{(2 \cdot n_{is} + 2 \cdot j_{sa}^{ik} - n_{sa} - j^{sa} - n - j_{sa}^{ik} - 2 \cdot l_k)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j_{sa}^{ik} - s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l = l \wedge l_s \leq D - n - 1 \wedge$$

$$2 \leq l \wedge D + l_{ik} + j_{sa}^{ik} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_i < n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge l = l > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, l_{k_2}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j^{sa}}^{DOST} = \left( \sum_{k=l} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})}^{(l_s+j_{sa}^{ik}-l)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{ik}} \right. \\ \left. \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-1} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \right) + \\ \left( \sum_{k=l} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(l_{sa}+n+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-l+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \right)$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})}^{(l_s+j_{sa}^{ik}-l)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1)}^{l_{sa}-l+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_k-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{(n_s=n+l_k+j_{sa}^{ik}-j_{ik}-1)}^{n_{ik}+j_{sa}-j^{sa}-l_{k_2}}$$

$$\frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_{sa} - l_{k_1} - 1)! \cdot (n_i - n_{ik} - l_{k_1} + 1)!}$$

$$\frac{(n_{sa} - 1)!}{(j^{sa} - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=l} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(l_s+j_{sa}^{ik}-l)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{( )}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot l_k)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot l_k)! \cdot (n - s)!}$$

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$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^l\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{n-l+1} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{n-l+1} \sum_{n_i=n+k}^n \sum_{n_{ik}=n+k_2-j_{ik}+1}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-k_2} \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)} j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} + j_{sa}^{ik} - j_{sa}^{ik})}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - \mathbb{k}_1} \sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)}^{(\quad)}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - \dots)}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n_{is} - s)!}$$

$$\frac{(l_s - l - 1)}{(l_s + j_{sa}^{ik} - j_{ik} - 1) \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - \dots)}{(D + j^{sa} + s - n - \dots - j_{sa})! \cdot \dots + j_{sa} - j^{sa} - s)!}$$

$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa}^{ik} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa}^{ik} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l \wedge l_{sa} + j_{sa}^{ik} - j_{sa}^{ik} = l_{ik} \wedge$

$l_{ik} \leq D + j_{sa}^{ik} - n \wedge l_{sa} \leq D + s - n \wedge$

$D \geq n < n \wedge l_{sa} - \mathbb{k}_2 > 0 \wedge$

$j_{sa} \leq j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} = j_{sa}^{ik} - 1 \wedge j_{sa} < j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^{ik}, \dots, j_{sa}^i\} \wedge$

$s \geq \dots = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \dots = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{sa} + j_{sa}^{ik} - l - j_{sa} + 1)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}$$



$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + j_{sa} - l_{sa})!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa})!}$$

$$\sum_{k=0}^{l_s + j_{sa}^{ik} - l_{sa} - j_{sa}^{ik}} \sum_{l=0}^{j_{sa}^{ik} - l_{sa} - j_{sa}^{ik} - k}$$

$$\sum_{k=0}^{n_i - j_s + 1} \sum_{l=0}^{n_i - j_s + 1 - k}$$

$$\sum_{k=0}^{n_{is} + j_{sa}^s - j_{sa}^{ik} - \mathbb{k}_1} \sum_{l=0}^{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}$$

$$\frac{(2 \cdot n_{is} + j_{sa}^s + l_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot j_{ik} + j_{sa}^s + l_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D - l_i) \leq n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=0}^{\lfloor \frac{j_{sa} - j_{ik} + l_{ik} + j_{sa} - l - j_{sa}^{ik}}{2} \rfloor} \sum_{\substack{j_{ik} = j_{sa}^{ik} \\ j_{sa} = l_i + n + j_{sa} - D - s}} \frac{\binom{n - j_{ik} - \mathbb{k}_1 + 1}{n_{ik} = n - j_{ik} + 1} \binom{n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2}{n_{sa} = n - j_{sa} + 1}}{(n_i - n_{ik} - \mathbb{k}_1 - 1)! \cdot (j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)! \cdot (n_{ik} - n_{sa} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})! \cdot (n_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})! \cdot (l_{ik} - l - j_{sa}^{ik})! \cdot (l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)! \cdot (l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})! \cdot (j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})! \cdot (D + j_{sa} - l_{sa} - s)! \cdot (D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} + \sum_{k=l}^{\lfloor \frac{l_{ik} - l + 1}{2} \rfloor} \sum_{\substack{j_{ik} = j_{sa}^{ik} + 1 \\ j_{sa} = l_{ik} + j_{sa} - l - j_{sa}^{ik} + 2}} \dots$$

GÜLDÜNKYA

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - 1)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - j_{sa})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} - l_{sa} - j_{sa} - j_{sa}^{ik})!}{(j_{ik} + j_{sa} - j_{sa} - l_{ik} - 1)! \cdot (j^{sa} + j_{sa}^{ik} - j_{sa})!} \cdot \\
 & \frac{(n + j_{sa} - n - s)!}{(n + j_{sa} - n - 1)! \cdot (n - j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{( )} \sum_{(j_{ik} + j_{sa}^{ik} - j_{sa})}^{l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1} \sum_{j^{sa}=l_i + n + j_{sa} - D - s} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}}^{( )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{( )} \\
 & \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot l_k)!}{(2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot l_k)! \cdot (n - s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

$$((D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz S_{j_{ik} j_{sa}}^{DOST} = \sum_{l=0}^{j_{sa}^{ik} - s - 1} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_i + j_{sa} - l - s + 1} \sum_{j_{sa} = l_i + n + j_{sa} - D - s} \\ \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2} \\ \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\ \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \\ \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \\ \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\ \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{l_i+j_{sa}-l-s+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}}$$

$$\frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - l_{k_1} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} + j_{sa} - n - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (j^{sa})!} \cdot$$

$$\frac{(l_{ik} - j_{sa} - 1)!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + j_{sa} - j^{sa} - l_{ik} - j_{sa})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{l_i+j_{sa}-l-s+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}}^{( )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{( )}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot l_k)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot l_k)! \cdot (n - s)!} \cdot$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$\sum_{j_{ik}, j_{sa}}^{DO} \sum_{i=1}^{(j^{sa} + k - j_{sa})} \sum_{j_{sa}^{ik}+1}^{l_s + j_{sa} - l} \sum_{j^{sa} = l_i + n + j_{sa} - D - s}^{l_s + j_{sa} - l}$$

$$\sum_{i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik} + j_{ik} - j^{sa} - k_2}$$

$$\frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

GÜLDINGNYA

$$\begin{aligned}
 & \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_i + j_{sa} - l - s + 1} j^{sa} = l_s + j_{sa} - l + 1 \\
 & \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa}}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \\
 & \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n - n_{sa} - 1)!}{(n_i + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(j_{ik} - 1)!}{(l_s - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - 1)!}{(j_{ik} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa}^{ik} - l_{sa} - s)!}{(D + j_{sa}^{ik} - n - j_{sa}^{ik})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{( )} \sum_{(j_{ik} = j_{sa}^{ik} + j_{sa}^{ik} - j_{sa})}^{l_s + j_{sa} - l} j^{sa} = l_i + n + j_{sa} - D - s \\
 & \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)} \\
 & \sum_{n_{ik} = n_{is} + j_{sa}^{ik} - j_{sa}^{ik} - \mathbb{k}_1}^{( )} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \\
 & \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n - s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

$$D \geq n < n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

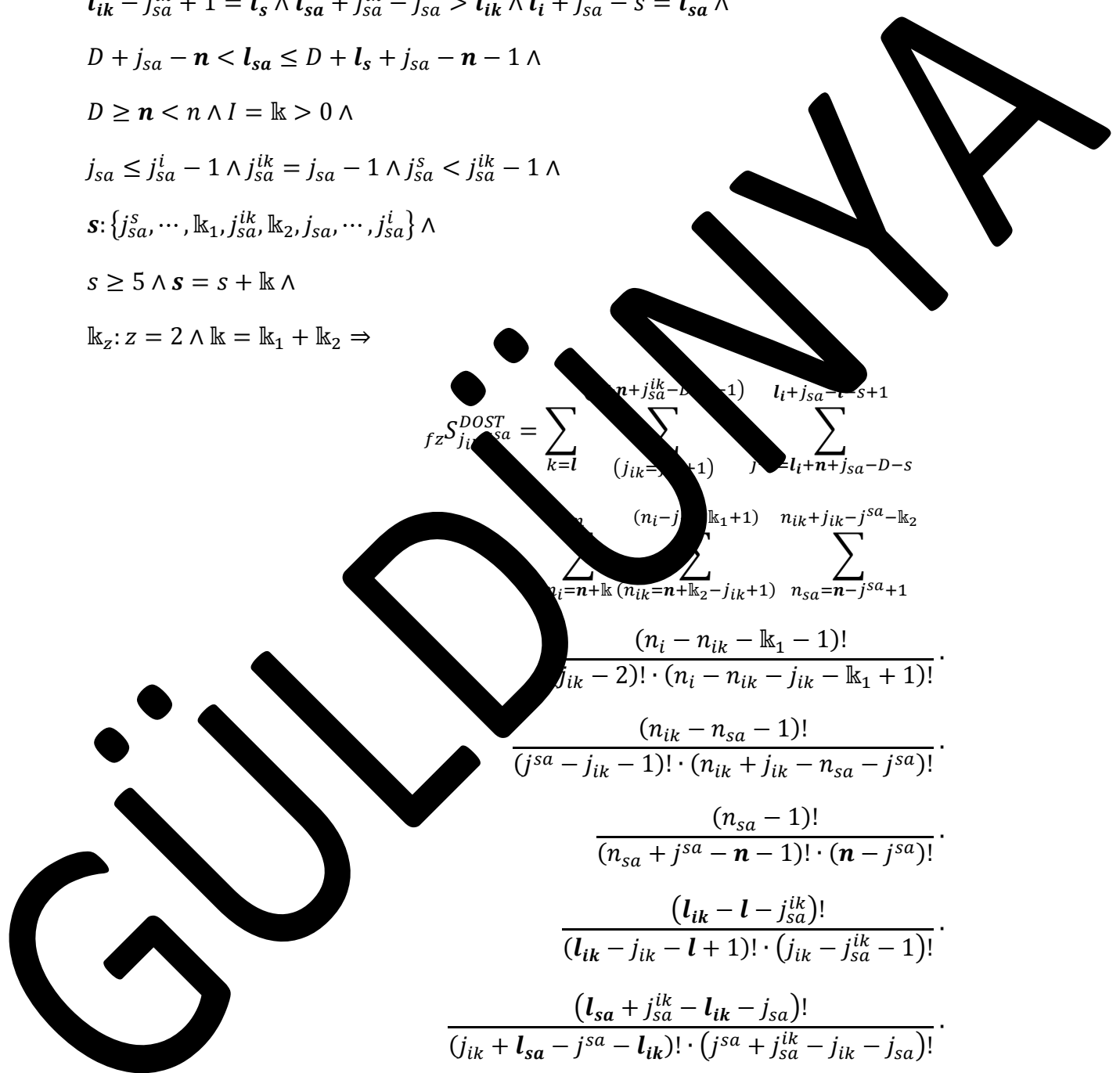
$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$fz S_{j_{sa}^{ik}}^{DOST} = \sum_{k=l}^{n+j_{sa}^{ik}-D-s+1} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_i+j_{sa}^{ik}-s+1} \sum_{j=l_i+n+j_{sa}-D-s}^{n_{ik}+j_{ik}-j^{sa}-k_2} \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$





$$\begin{aligned}
 & \sum_{k=l} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(l_s+j_{sa}^{ik}-l)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{l_i+j_{sa}-l-s+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_i - j_{ik} - 1)!}{(n_i + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - j_{ik} - 1)!}{(l_i - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - 1)!}{(j_{ik} + j_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \\
 & \sum_{k=l} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(l_s+j_{sa}^{ik}-l)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{(\quad)} \\
 & \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot l_k)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot l_k)! \cdot (n - s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

GÜLDÜZMAYA

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

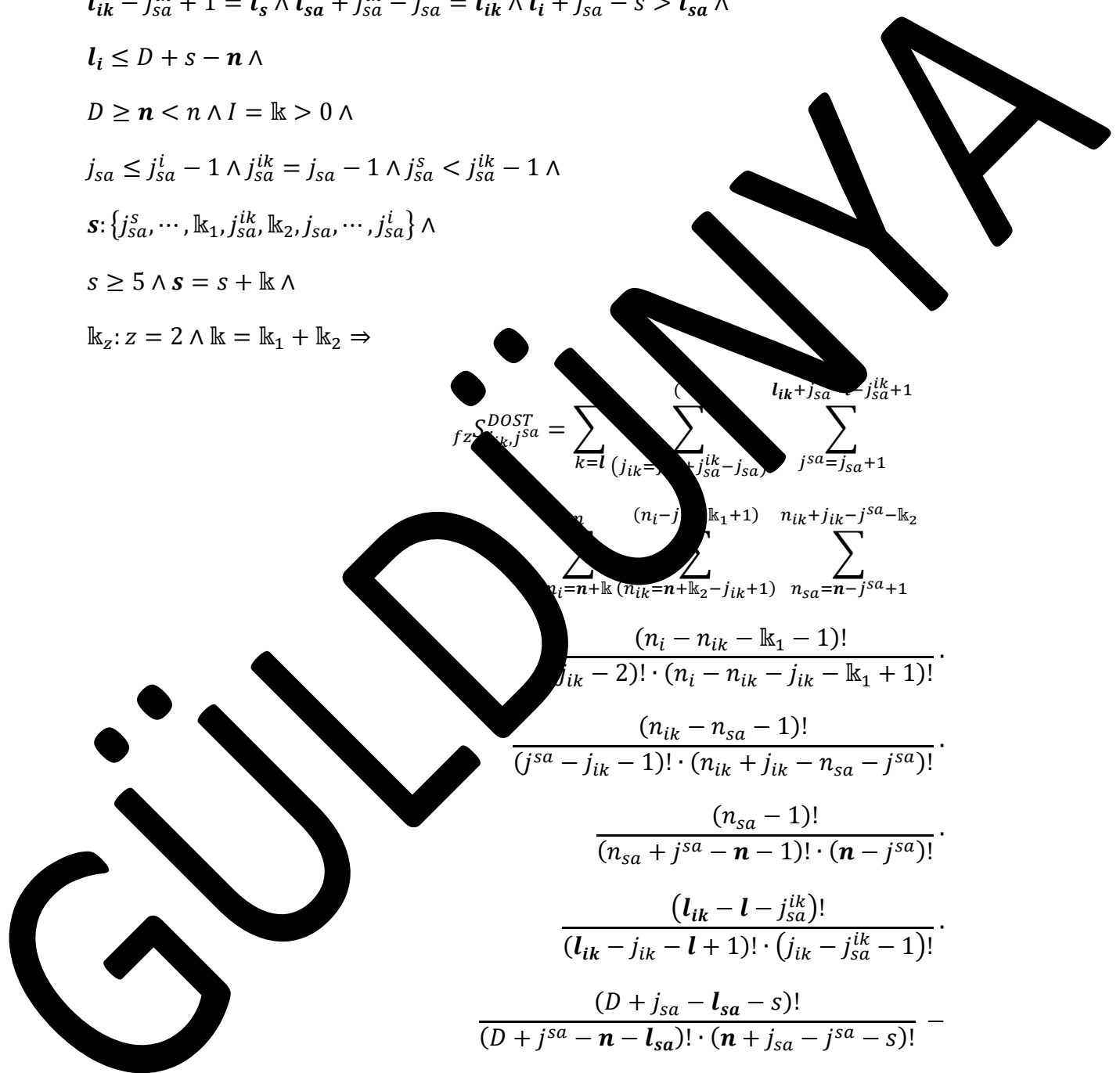
$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$fz^{DOST} = \sum_{k=l}^{\binom{D+j_{sa}-l-j_{sa}^{ik}+1}{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}} \sum_{j_{sa}^{ik}=j_{sa}+1}^{\binom{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}{j_{sa}^{ik}=j_{sa}+1}} \sum_{n_i=n+k}^{\binom{n_i-j_{ik}-k_1+1}{n_{ik}=n+k_2-j_{ik}+1}} \sum_{n_{sa}=n-j_{sa}+1}^{\binom{n_{ik}+j_{ik}-j_{sa}-k_2}{n_{sa}=n-j_{sa}+1}} \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \sum_{k=l}^{\binom{D+j_{sa}-l-j_{sa}^{ik}+1}{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}} \sum_{j_{sa}^{ik}=j_{sa}+1}^{\binom{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}{j_{sa}^{ik}=j_{sa}+1}}$$



$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n-s)!}$$

$$\frac{(l_s - l_i - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - l - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - \dots)! \cdot (n - \dots - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} \leq l_i \wedge l_i - j_{sa} - s > \dots \wedge$$

$$D + s - n < l_i \leq D + l_{sa} - s - n - j_{sa} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} - j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s \in \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^s, \mathbb{k}_2, j_{sa}^s, \dots, j_{sa}^i\} \wedge$$

$$s \geq \dots \wedge s = s + \mathbb{k}$$

$$z: z = \dots \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\quad)} \sum_{j^{sa}=j_{sa}+1}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(\cdot)} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}, j_{sa}^{ik}=l_i+n+j_{sa}-D)}$$

$$\sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}$$

$$\sum_{(n_{is}+j_{sa}^s-j_{sa}^{ik}=s-1)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}$$

$$\frac{(n_{is} + j_{ik} + j_{sa}^s - n_{sa} - s - j_{sa}^{ik} - 2 \cdot l_k)!}{(2 \cdot n_{is} + 2 \cdot j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot l_k)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n \wedge l \neq i \wedge l \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa}^{ik} \wedge j_{sa}^{ik} \leq j_{sa} \wedge$$

$$j_{ik} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n \wedge$$

$$D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j^{sa}}$$

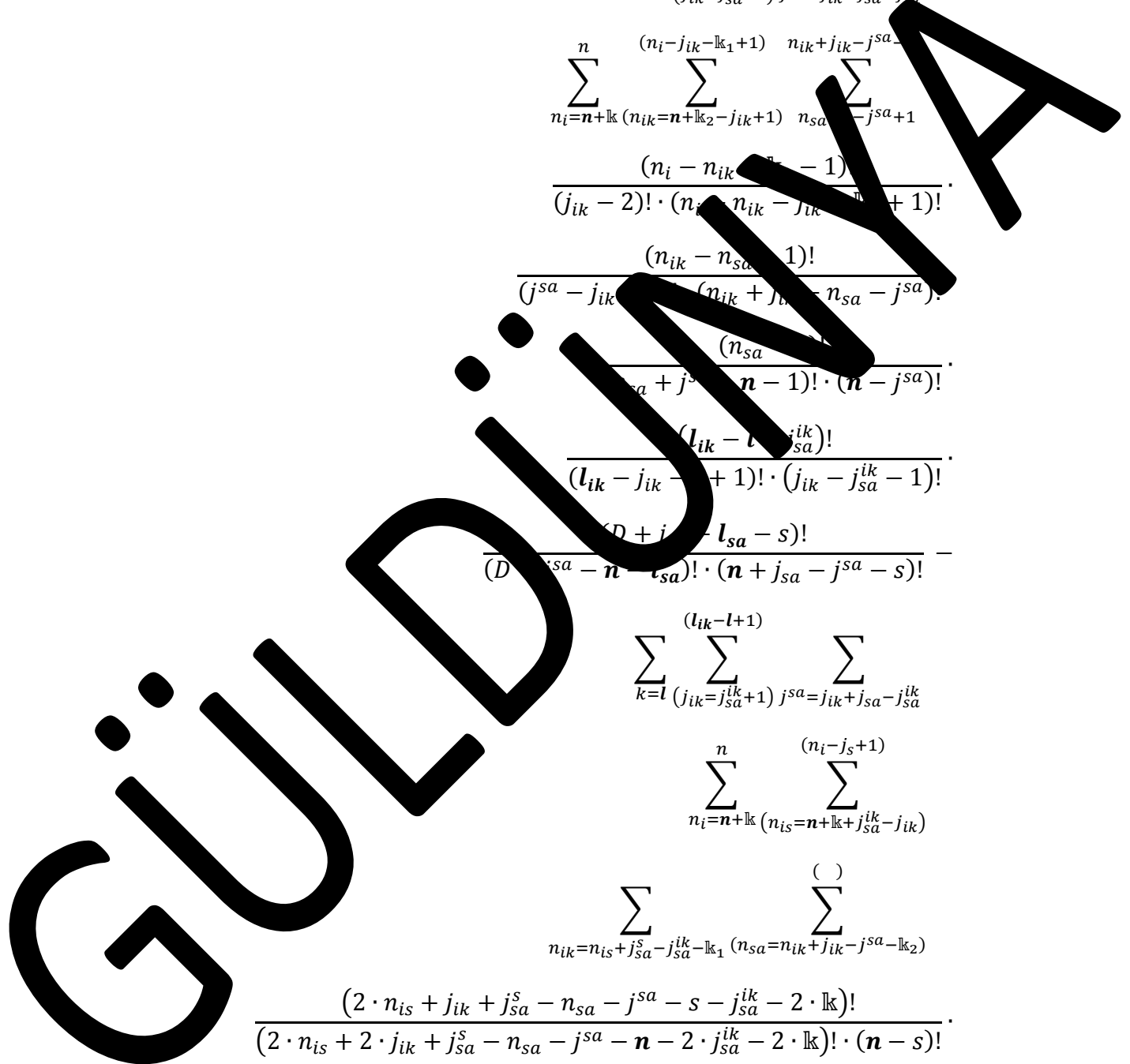
$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l_{sa}^{ik})!}{(l_{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$



$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z^{DOST} S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{ik}-l+1)} \sum_{j_{ik}=j_{sa}^{ik}+1}^{(n_i-j_{sa}^{ik}-k_1+1)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{(n_{ik}+j_{ik}-j_{sa}-k_2)} \sum_{n_i=n+k}^{(n_{ik}=n+k_2-j_{ik}+1)} \sum_{n_{sa}=n-j_{sa}+1}^{(n_{sa}-1)}$$

$$\frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \cdot \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(l_{ik}-l+1)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n-s)!}$$

$$\frac{(l_s - l_i - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - l - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - j_{sa}^{ik} - j_{ik} - l)! \cdot (n_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - l_i \wedge l_i - j_{sa} - s > l_i \wedge$$

$$D + s - n < l_i \leq D + l_s - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq l_i - 1 \wedge j_{sa}^{ik} \leq l_{sa} - 1 \wedge j_{sa}^s \leq l_i - 1 \wedge$$

$$s \in \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq l_i \wedge s = s + \mathbb{k}$$

$$z: z = z, \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(l_{sa}+j_{sa}^{ik}-l-j_{sa}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-l_{sa})} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}$$

$$\sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k2})}$$

$$\sum_{(n_{is}+j_{sa}-j_{sa}^{ik})} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k2})}$$

$$\frac{(n_{is} + j_{ik} + j_{sa} - n_{sa} - s - j_{sa}^{ik} - 2 \cdot l_k)!}{(2 \cdot n_{is} + 2 \cdot j_{sa} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot l_k)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$(D \geq l_i < n \wedge l \neq l_i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l \neq l_i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$



$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n) \wedge$$

$$D \geq n < n \wedge I = k > 0 \wedge$$

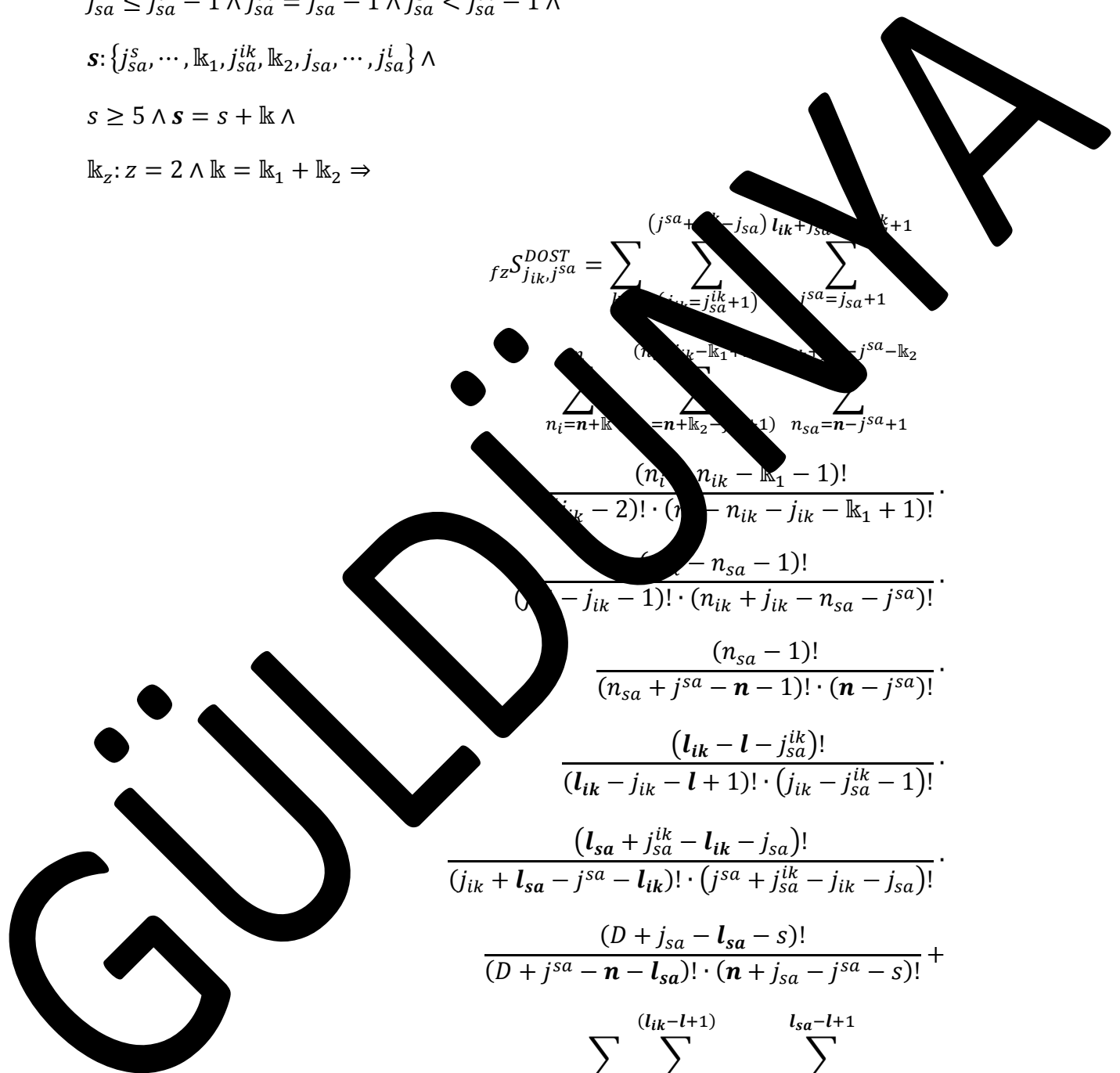
$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_{z} S_{j_{ik}, j_{sa}}^{DOST} = \sum_{l=1}^{(j_{sa}^{sa} - j_{sa})} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{(j_{sa}^{sa} - j_{sa})} \sum_{j_{sa} = j_{sa} + 1}^{(j_{sa}^{sa} - j_{sa})} \sum_{n_i = n + k}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{ik} = n + k_2 - j_{ik} + 1}^{(n_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{(n_{sa} - j_{sa} - k_2)} \frac{(n_i - 1)! (n_{ik} - k_1 - 1)!}{(n_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} - j_{sa} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} + \sum_{k=l}^{(l_{ik} - l + 1)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{(l_{sa} - l + 1)} \sum_{j_{sa} = l_{ik} + j_{sa} - l - j_{sa}^{ik} + 2}^{(l_{sa} - l + 1)} \sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{(n_{ik} + j_{ik} - j_{sa} - k_2)}$$



$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa}^{ik})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - l_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa})!}{(D + j^{sa} - n - l_{sa})! \cdot (n_{sa} + j_{sa}^{ik} - j^{sa} - s)!} \cdot \sum_{k=l}^{l_{ik} + j_{sa}^{ik} - j_{sa}^{ik} + 1} \sum_{j_{sa}^{ik} = j_{sa} + 1}^{j_{sa}^{ik} + 1} \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - \mathbb{k}_1} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{( )}$$

$$\frac{(n_{is} + j_{sa}^s + j_{sa}^{ik} - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$(D > n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n)) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$j_{sa}^{DOST} = \sum_{k=l}^{(l_{ik}-l+1)} \sum_{j_{sa}^{ik}=j_{sa}+1}^{l_{sa}-l+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{n} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{j_{ik}-\mathbb{k}_1+1} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

GÜLDÜZÜMÜYA

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k+j_{sa}^{ik}-j_{sa}^{ik})} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}^{ik})} \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot k)! \cdot (n_{is} - s)!} \frac{(l_s - l - k)!}{(l_s + j_{sa}^{ik} - j_{ik})! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \frac{1}{(D - n - 1 - j_{sa}^{ik})! \cdot (n_{is} + j_{sa} - j^{sa} - s)!}$$

$((D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1) \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa}^{ik} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa}^{ik} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$D + s - n - 1 \leq D + l_s + j_{sa} - n - 1) \wedge$

$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa}^{ik} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa}^{ik} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$

$D + j_{sa} - n - 1 \leq D + l_s + j_{sa} - n - 1)) \wedge$

$D + s - n - 1 \leq D + l_s + j_{sa} - n - 1 \wedge$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}^i, \dots, j_{sa}^i\} \wedge$

$s \geq 5 \wedge s = s + k \wedge$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z^{DOST} S_{j_{ik}, j^{sa}} = \sum_{k=l} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(j^{sa}+j_{sa}^{ik}-j_{sa})} l_{ik}+j_{sa}-l-j_{sa}^{ik}+1 \sum_{j^{sa}=l_{sa}+n-D}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2 \sum_{n_{sa}=n-j^{sa}+1}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik})! (l_{ik} - j_{sa})!}{(l_{sa} - j_{sa} - l_{ik})! (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(l_{ik}-l+1)} \sum_{j^{sa}=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2}^{l_{sa}-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2 \sum_{n_{sa}=n-j^{sa}+1}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{(\quad)} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})}^{(\quad)} \sum_{(j_{sa}=l_i+n+j_{sa}-D-s)}^{l_{ik}+j_{sa}-l-j_{sa}+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_{ik})}^{(n_i+l_k+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-l_k-1}^{(\quad)} \sum_{(n_{ik}=n_{is}+j_{sa}^{ik}-l_k-1)}^{(\quad)} \sum_{(j_{sa}-l_k)}^{(\quad)}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - s - j_{sa}^{ik} - 2 \cdot l_k)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - s - 2 \cdot j_{sa}^{ik} - 2 \cdot l_k)! \cdot (n - s)!}$$

$$\frac{(D - l - 1)!}{(j_{sa} + j_{sa}^{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j_{sa} + \dots - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

- $((D \geq n < n \wedge l = l \wedge l_s \leq D - n + 1 \wedge$
- $j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$
- $j_{ik} - j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - s \wedge$
- $l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$
- $D + s - n < l_{sa} \leq D + l_s + s - n - 1) \vee$
- $(D \geq n < n \wedge l \neq l \wedge l_s \leq D - n + 1 \wedge$
- $j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$
- $j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - s \wedge$
- $l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$
- $D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \wedge$
- $D \geq n < n \wedge l = l_k > 0 \wedge$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{sa}+n+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{(j_{ik}=j_{sa}^k+1)}^{l_{sa}-l+1} \sum_{j_{sa}^{sa}+n-D}^{l_{sa}-l+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j_{sa}^{sa}-\mathbb{k}_2}^{n_{ik}+j_{ik}-j_{sa}^{sa}-\mathbb{k}_2} \frac{(n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)! \cdot (n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!} \cdot \frac{(n_{ik}-n_{sa}-1)!}{(j_{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j_{sa}^s)!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j_{sa}-n-1)! \cdot (n-j_{sa}^s)!} \cdot \frac{(l_{ik}-l-j_{sa}^{ik})!}{(l_{ik}-j_{ik}-l+1)! \cdot (j_{ik}-j_{sa}^{ik}-1)!} \cdot \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}-n_{sa}-j_{sa}-l_{ik})! \cdot (j_{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot \frac{(D+j_{sa}-l_{sa}-s)!}{(D+j_{sa}-n-l_{sa})! \cdot (n+j_{sa}-j_{sa}^s-s)!} + \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})}^{l_{sa}-l+1} \sum_{j_{sa}^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{l_{sa}-l+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}^{sa}+1}^{n_{ik}+j_{ik}-j_{sa}^{sa}-\mathbb{k}_2} \frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)! \cdot (n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!} \cdot \frac{(n_{ik}-n_{sa}-1)!}{(j_{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j_{sa}^s)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{(j_{sa}^{ik}=j_{sa}-j_{sa}^{ik})} \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})} \sum_{(n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{sa}^{ik})} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k2})} \frac{(n_{is} + j_{ik} + j_{sa}^{ik} - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot l_k)!}{(2 \cdot n_{is} + 2 \cdot j_{sa}^s + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot l_k)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$(D \geq n < n \wedge l \neq l_i) \wedge l_s \leq D - n + 1 \wedge$

$j_{sa}^{ik} \leq j_{sa} \leq j^{sa} \wedge j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$(j_{sa}^{ik} - l_i) > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$

$l_i \leq D + s - n) \vee$

$(D \geq n < n \wedge l \neq l_i) \wedge l_s \leq D - n + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$



$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$l_{sa} \leq D + j_{sa} - n \wedge l_i \leq D + s - n)) \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(j_{sa} + j_{sa}^{ik} - j_{sa} - l + j_{sa} - l - j_{sa}^{ik} + 1)} \sum_{j_{sa}^{ik} = j_{sa}^{ik} + 1}^{j_{sa}^{ik} - j_{sa}^{ik} + 1} \sum_{j_{sa} = j_{sa} + 1}^{j_{sa} - j_{sa} + 1} \sum_{n_i = n + k}^n \sum_{n_{ik} = n_{ik} - j_{ik} + 1}^{(n_i - j_{ik} - 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{ik} + j_{ik} - j_{sa} - k_2} \frac{(n_i - j_{ik} - k_1 - 1)!}{(j_{ik} - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} + \sum_{k=l} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{(l_{ik} - l + 1)} \sum_{j_{sa} = l_{ik} + j_{sa} - l - j_{sa}^{ik} + 2}^{l_{sa} - l + 1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}}$$

$$\frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - 1)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l - l - j_{sa})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(l_{sa} - l_{sa} - j_{sa})!}{(j_{ik} + j_{sa} - j_{sa} - l_{ik})! \cdot (j^{sa} - j_{sa}^{ik} - j_{sa})!} \cdot$$

$$\frac{(n + j_{sa} - n - s)!}{(n + j_{sa} - n - s)! \cdot (n - j_{sa} - j^{sa} - s)!} \cdot$$

$$\sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{( )} \sum_{j^{sa}=j_{sa}+1}^{l_s+j_{sa}-l}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}}^{( )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{( )}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot l_k)!}{(2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot l_k)! \cdot (n - s)!} \cdot$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$D \geq n < n \wedge l \neq i \wedge l \wedge l_{sa} \leq D + j_{sa} - n \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z S_{j_{ik} j_{sa}}^{DOST} = \left( \sum_{k=l} \left( \sum_{j_{sa}+j_{sa}^{ik}-j_{sa}} \sum_{j_{sa}=j_{sa}+1}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \right. \right. \\ \left. \left. \sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_{ik}-k_1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{sa}-j_{sa}-k_2} \right. \right. \\ \left. \left. \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \frac{(n_{sa} - n_{sa} - 1)!}{(n_{sa} - j_{sa} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \right) + \\ \left( \sum_{k=l} \left( \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(j_{sa}+j_{sa}^{ik}-j_{sa}-1)} \sum_{j_{sa}=j_{sa}+2}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \right. \right. \\ \left. \left. \sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-k_2} \right. \right. \\ \left. \left. \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \right) \right)$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa})!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa})!} +$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{j_{sa}^{ik+2}}^{(l_{sa}-l+1)} \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n_{sa}-j_{ik}+1)}^{(n_i-j_{ik}-l+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-k_2}$$

$$\frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - (n_i - n_{ik} - j_{ik} - k_1 + 1))!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=l} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(j^{sa}=j_{sa}+1)}^{l_{sa}+j_{sa}-l}$$

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$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{()}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n-s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - l - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - j_{sa}^{ik})! \cdot (n_{is} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_{sa} \leq D + j_{sa} - n \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - 1 > l_s \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{ik} < j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s - \mathbb{k} \wedge$$

$$\mathbb{k}_2 = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \left( \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \right)$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\begin{aligned}
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \left( \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_{sa}^{l+1}} \sum_{(j_{sa}=j_{ik}+j_{sa}^{ik}+1)}^{j_{sa}^{ik}+1} \right) \cdot \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_i-j_{ik}^{l+1}+1)}^{(n_i-j_{ik}^{l+1}+1)} \sum_{(n_{sa}=n-j_{sa}^{l+1})}^{n_{ik}+j_{ik}^{l+1}-l_{k_2}} \\
 & \frac{(n_{sa} - n_{ik})!}{(j_{ik} - 2)! \cdot (n_{sa} - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
 & \frac{(n_{sa} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j_{sa}=j_{ik}+j_{sa}^{ik}-j_{sa}^{ik}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{l_{k_1}}-l_{k_2}} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{( )}
 \end{aligned}$$

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$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$l_{sa} \leq D + j_{sa} - n \wedge l_i \leq D + s - n) \wedge$$

$$D \geq n < n \wedge l = i \wedge l_s = 0 \wedge$$

$$j_{sa}^{ik} \leq j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} = j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} < j_{sa}^{ik} - 1 \wedge$$

$$s: \{ \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^{ik}, \dots, j_{sa}^{ik} \}$$

$$j_{sa}^{ik} \geq 5 \wedge j_{sa}^{ik} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k}_1 = \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_{sa}-l+1} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa})!}{(D + j^{sa} - n - l_{sa})! \cdot (D + j_{sa} - j^{sa})!}$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{j=j_{sa}^{ik}+1}^{n_{sa} - j_{sa}^{ik}}$$

$$\sum_{i=n+l_k}^{n_{sa} - j_{sa}^{ik}} \sum_{j=j_{sa}^{ik}+1}^{(n_i - j_s + 1)}$$

$$\sum_{i=n_{is} + j_{sa}^s - j_{sa}^{ik} - l_{k_1}}^{( )} \sum_{j=j_{sa}^{ik}+1}^{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - l_{k_2})}$$

$$\frac{(2 \cdot n_{is} + j_{sa}^s + j_{sa}^{ik} - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot l_{k_2})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot l_{k_2})! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D - n > l_i \wedge l_i \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$2 \leq l \leq D - l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa} - j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$



$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \left( \sum_{k=l} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik})} \sum_{(j_{sa}=l_{sa}+n-D)} \frac{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}{(j_{ik}-2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \right. \\ \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-\mathbb{k}_2} \frac{(n_{ik}-n_{sa}-1)!}{(j_{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j_{sa})!} \cdot \frac{(n_{sa}-1)!}{(j_{sa}-n-1)! \cdot (n-j_{sa})!} \\ \left. \frac{(l_{ik}-l-j_{sa}^{ik})!}{(l_{ik}-j_{ik}-l+1)! \cdot (j_{ik}-j_{sa}^{ik}-1)!} \frac{(D+j_{sa}-l_{sa}-s)!}{(D+j_{sa}-n-l_{sa})! \cdot (n+j_{sa}-j_{sa}-s)!} \right) + \\ \left( \sum_{k=l} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(j_{sa}+j_{sa}^{ik}-j_{sa}-1)} \sum_{(j_{sa}=l_{sa}+n-D)}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \right. \\ \left. \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \right)$$

$$\begin{aligned}
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(l_{ik}-l+1)} \sum_{(j_{ik}+j_{sa}-l-j_{sa}^{ik})}^{(l_{ik}-l+1)} \cdot \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}+j_{ik}+1)}^{(n_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}-j^{sa}-\mathbb{k}_2)} \cdot \\
 & \frac{(n_{ik} - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_{ik} - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(n_{sa} - j_{ik} - n_{ik} - j_{sa} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) - \\
 & \sum_{k=l}^{( )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{( )} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_s+j_{sa}-l} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}
 \end{aligned}$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - l)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

$$2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge s < j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \leq 5 \wedge s = j_{sa} - \mathbb{k} \wedge$$

$$\mathbb{k}_2 = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \left( \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})} j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik} \right) \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\begin{aligned}
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \left( \sum_{k=l}^{(l_{sa} + n + j_{sa}^{ik} - D - j_{sa} - 1)} \sum_{(j_{ik} = j_{sa}^{ik} + j^{sa} = j_{sa} - l + 1)} \sum_{j_{sa} = j_{sa} - l + 1}^{n - D} \right) \cdot \\
 & \sum_{n_i = n + \mathbb{k}_1}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \\
 & \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{k=l}^{(l_{ik} - l + 1)} \sum_{(j_{ik} = l_{sa} + n + j_{sa}^{ik} - D - j_{sa})}^{l_{sa} - l + 1} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik} + 1} \\
 & \sum_{n_i = n + \mathbb{k}_1}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \\
 & \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
 \end{aligned}$$

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$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik})!} \cdot$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (D + j_{sa} - j^{sa} - 1)!} \cdot$$

$$\sum_{i=0}^{n_{ik} - l_{sa} - j_{sa}^{ik} - l} \sum_{k=0}^{n_{ik} - l_{sa} - j_{sa}^{ik} - l - i} \sum_{s=0}^{n_{ik} - l_{sa} - j_{sa}^{ik} - l - i - k} \sum_{\mathbb{k}=0}^{n_{ik} - l_{sa} - j_{sa}^{ik} - l - i - k - s} \sum_{\mathbb{k}_1=0}^{n_{ik} - l_{sa} - j_{sa}^{ik} - l - i - k - s - \mathbb{k}_1} \sum_{\mathbb{k}_2=0}^{n_{ik} - l_{sa} - j_{sa}^{ik} - l - i - k - s - \mathbb{k}_1 - \mathbb{k}_2} \sum_{\mathbb{k}_3=0}^{n_{ik} - l_{sa} - j_{sa}^{ik} - l - i - k - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3} \dots$$

$$\frac{(2 \cdot n_{is} + j_{sa}^{ik} + j_{sa}^{ik} - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^{ik} - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n - s)!} \cdot$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D - n - l_i \neq l_i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1 \wedge$$

$$D \geq n < n \wedge l_i = \mathbb{k} > 0 \wedge$$

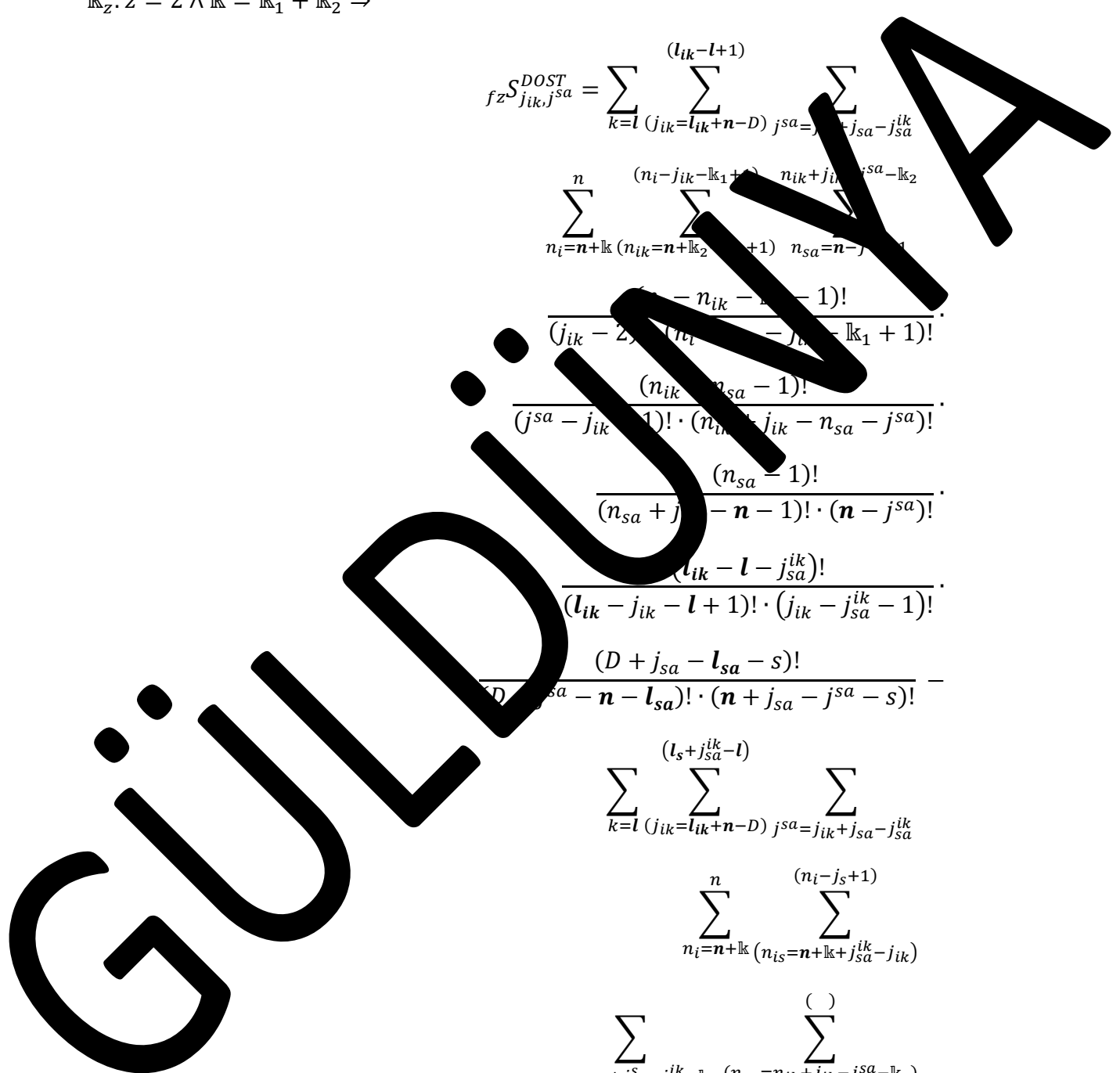
$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik} j_{sa}}^{DOST} = \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_{ik}+n-D)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{(n_{sa}=n-j_{sa}+1)}^{(n_{ik}+j_{ik}+j_{sa}-\mathbb{k}_2)} \frac{(n_{sa}-n_{ik}-j_{sa}-1)!}{(j_{ik}-2)! \cdot (n_{sa}-j_{sa}-\mathbb{k}_1+1)!} \cdot \frac{(n_{ik}+n_{sa}-1)!}{(j_{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j_{sa})!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j_{sa}-n-1)! \cdot (n-j_{sa})!} \cdot \frac{(l_{ik}-l-j_{sa}^{ik})!}{(l_{ik}-j_{ik}-l+1)! \cdot (j_{ik}-j_{sa}^{ik}-1)!} \cdot \frac{(D+j_{sa}-l_{sa}-s)!}{(D+j_{sa}-n-l_{sa})! \cdot (n+j_{sa}-j_{sa}-s)!} \sum_{k=l}^{(l_s+j_{sa}^{ik}-l)} \sum_{(j_{ik}=l_{ik}+n-D)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-\mathbb{k}_2)}^{(\quad)} \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n-s)!}$$



$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{l=1}^{j_{ik} + j_{sa} - l - s + 1} \sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}}^{j_{ik} + j_{sa} - l - s + 1} \sum_{j_{sa} = l_i + n + j_{sa} - D - s}^{j_{sa} = l_i + n + j_{sa} - D - s} \\ \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \\ \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$







$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z^{DOST} S_{j_{ik}, j_{sa}} = \sum_{k=l}^{(j_{sa} + j_{sa}^{ik} - j_{sa})} \sum_{(j_{ik} = l_{ik} + n - D)} \sum_{j_{sa} = l_i + j_{sa} - D - s}^{l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1} \dots$$

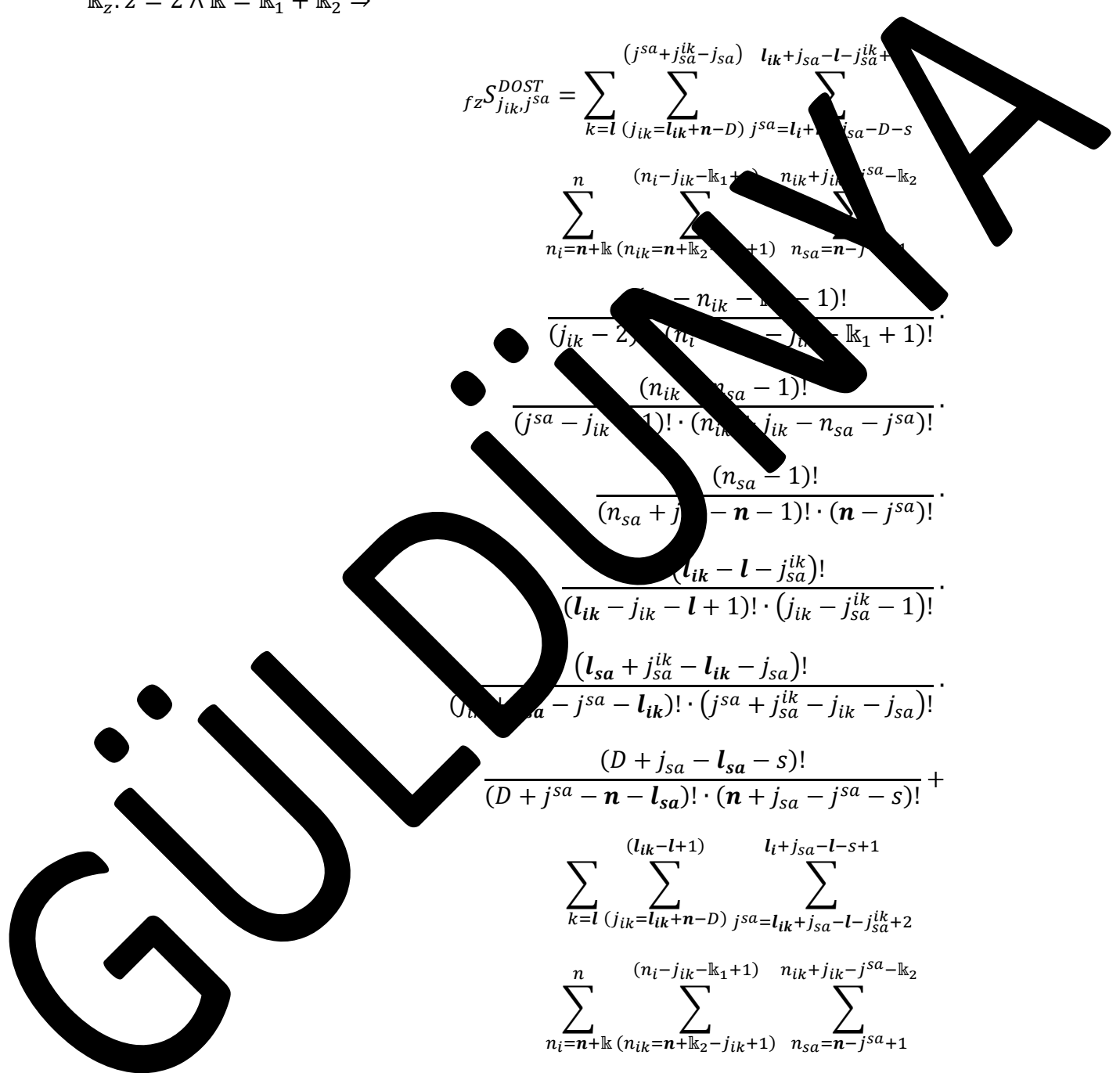
$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \dots$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} +$$

$$\sum_{k=l}^{(l_{ik} - l + 1)} \sum_{(j_{ik} = l_{ik} + n - D)} \sum_{j_{sa} = l_{ik} + j_{sa} - l - j_{sa}^{ik} + 2}^{l_i + j_{sa} - l - s + 1} \dots$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \dots$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!}$$





$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik} j^{sa}}^{DOST} = \sum_{k=l}^{(l_i+n+j_{sa}^{ik}-D-s-1)} \sum_{(j_{ik}=l_{ik}+n-D)}^{l_i+j_{sa}-l-s+1} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l_{sa}^{ik})!}{(l_{ik} - j_{ik} - l_{sa}^{ik} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{ik} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{l_i+j_{sa}-l-s+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_{sa} + n + j_{sa}^{ik} - D - j_{sa} - k)} \sum_{(j_{sa}^{ik} = j_{ik} + j_{sa} - j_{sa}^{ik})}$$

$$\sum_{(n + k)} \sum_{(n_{is} + k + j_{sa}^{ik} - j_{ik})}$$

$$n_{ik} = n_{is} + j_{sa}^{ik} - k_1 \quad (n_{ik} + j_{ik} - j^{sa} - k_2)$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^{ik} - n_{sa} - j^{sa} - j_{sa}^{ik} - 2 \cdot k)!}{(2 \cdot n_{is} + 2 \cdot j_{sa}^{ik} - n_{sa} - j^{sa} - n - j_{sa}^{ik} - 2 \cdot k)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j_{sa}^{ik} - s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge l_i \leq D + s - n) \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^l\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

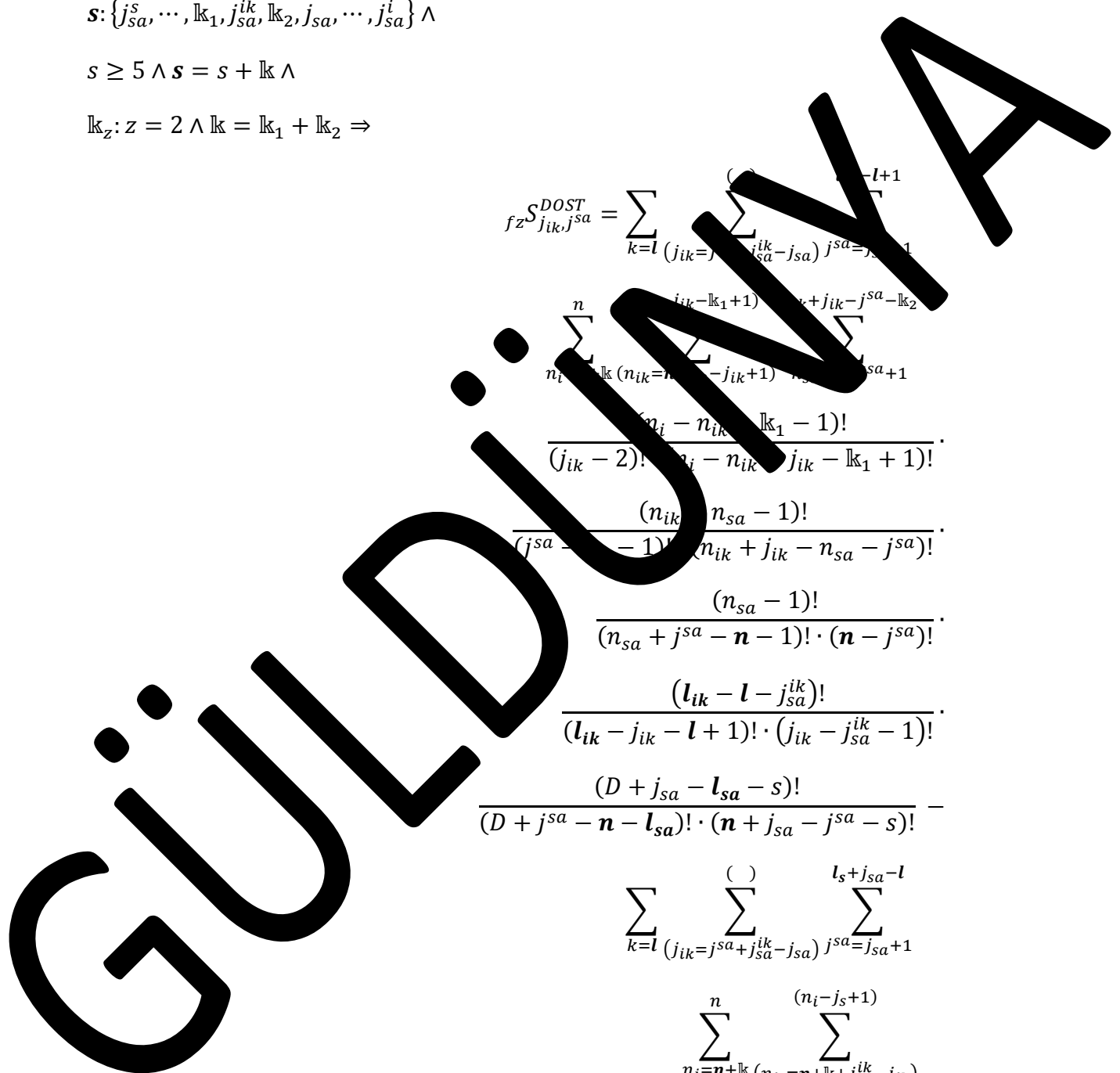
$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_{zS}^{DOST}_{j_{ik}, j_{sa}} = \sum_{k=l}^{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})} \sum_{j_{sa}=j_{sa}+1}^{l+1} \sum_{n_i=n+l}^n \sum_{n_{is}=n+l+k}^{j_{ik}-k_1+1} \sum_{n_{sa}=n_{is}+j_{sa}-k_2}^{j_{ik}-j_{sa}-k_2} \frac{(n_i - n_{ik})! (k_1 - 1)!}{(j_{ik} - 2)! (n_i - n_{ik})! (j_{ik} - k_1 + 1)!} \cdot \frac{\binom{n_{ik}}{n_{sa} - 1}}{(j_{sa} - 1)! (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})} \sum_{j_{sa}=j_{sa}+1}^{l_s+j_{sa}-l}$$

$$\sum_{n_i=n+l}^n \sum_{(n_{is}=n+l+k+j_{sa}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}-j_{sa}^{ik}-k_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-k_2)}$$



$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - \mathbf{n} - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (\mathbf{n} - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - \mathbf{n} - l_i - j_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa})!}$$

$$D \geq \mathbf{n} < \mathbf{n} \wedge l \neq i \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - \mathbf{n} < l_i \leq D + l_{sa} + s - \mathbf{n} - j_{sa}$$

$$D \geq \mathbf{n} < \mathbf{n} \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$j_{ik}^{OST}, j_{sa}^s = \sum_{k=l} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{j_{sa}^{sa-l+1}}^{j_{sa}^{sa-l+1}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^{\mathbf{n}} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l} \sum_{\binom{()}{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}} \sum_{l_s+j_{sa}-l}^{l_s+j_{sa}-l} j^{sa=l_i+n+j_{sa}-D-s}$$

$$\sum_{n_i=n+l_k}^n \sum_{\binom{()}{n_i=n+l_k}} \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} (n_i=n+l_k+j_{sa}^{ik}-j_{ik})$$

$$\sum_{n_{ik}=n_i+j_{sa}^s-j_{sa}^{ik}-l_{sa}^{ik}} \sum_{\binom{()}{n_{sa}=n_{ik}+j_{ik}-l_{ik_2}}} (n_{ik}=n_i+j_{sa}^s-j_{sa}^{ik}-l_{sa}^{ik}-l_{sa}^{ik_2})$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - l_{sa}^{ik} - l_{sa}^{ik_2})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - l_{sa}^{ik} - l_{sa}^{ik_2} - 2 \cdot l_{sa}^{ik_2})! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa} - j_{ik} - l_{sa}^{ik} - 1) \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + j_{sa} - n - l_i - j_{sa} - s)! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l \neq l_i \wedge l \leq D - n + 1) \vee$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa}^{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa}^{ik} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{ik} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq l_i \wedge l \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa}^{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa}^{ik} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$D \geq n < n \wedge l = l_i > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$



$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{sa} + j_{sa}^{ik} - l - j_{sa} + 1)} \sum_{(j_{ik} = l_{sa} + n + j_{sa}^{ik} - D - j_{sa})} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i = n + k}^n \sum_{(n_i = n + k_2 - j_{ik} + j_{sa}^{ik} - j_{sa} - k_2)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{(n_i = n + k_1 - j_{ik} + j_{sa}^{ik} - j_{sa} - k_1)}^{(n_i - j_{ik} - k_1 + 1)}$$

$$\frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \frac{(j_{sa}^{ik} - k_1 - 1)! \cdot (n_{ik} + j_{ik} - j_{sa}^{ik} - j_{sa})!}{(j_{sa}^{ik} - k_1 - 1)! \cdot (n_{ik} + j_{ik} - j_{sa}^{ik} - j_{sa})!}$$

$$\frac{(n_{sa} - j_{sa} - n + 1)! \cdot (n - j_{sa})!}{(n_{sa} - j_{sa} - n + 1)! \cdot (n - j_{sa})!}$$

$$\frac{(l_s - l - j_{sa}^{ik})!}{(l_s - l - j_{sa}^{ik})! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - l_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - k_1}^{( )} \sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - k_2)}^{( )}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - s - j_{sa}^{ik} - 2 \cdot k)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot k)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D + s - n < l_i \leq D + l_{sa} + s - n - j_{sa}) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_i \wedge l_i + j_{sa} - n - j_{sa}^{ik} = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

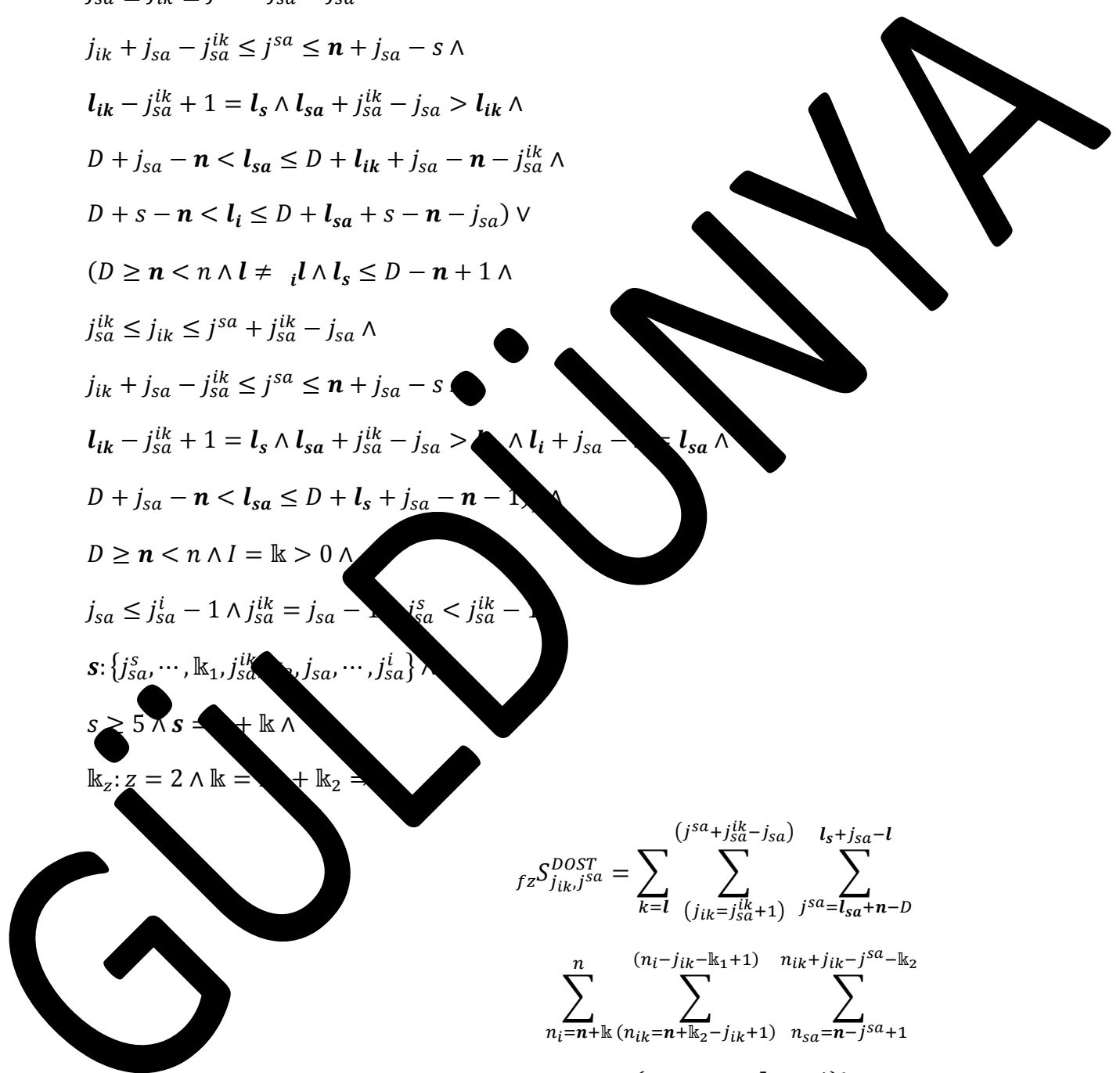
$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = \dots + k \wedge$$

$$k_z: z = 2 \wedge k = \dots + k_2 = \dots$$

$$f_z S_{j_{ik}, j^{sa}}^{DOST} = \sum_{k=l}^{(j^{sa} + j_{sa}^{ik} - j_{sa})} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_s + j_{sa} - l} \sum_{j^{sa} = l_{sa} + n - D}^{n} \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - k_2} \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$



$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{j_{ik}=j_{sa}^{ik}} \sum_{j^{sa}=l_s + j_{sa} - l + 1}$$

$$\sum_{n_i=n+l_k}^n \sum_{n_{ik}=n+l_k+1}^{(j_{ik}-1)} \sum_{n_{sa}=n-j^{sa}+1}^{(j_{ik}-j^{sa}-l_k_2)}$$

$$\frac{(n_{ik} - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_{ik} - j_{ik} - l_{k_1} + 1)!}$$

$$\frac{(n_{sa} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - j_{sa})! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l} \sum_{j_{ik}=j_{sa}^{ik} + j_{sa}^{ik} - j_{sa}}^{( )} \sum_{j^{sa}=l_i + n + j_{sa} - D - s}^{l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1}$$

$$\sum_{n_i=n+l_k}^n \sum_{n_{is}=n+l_k+j_{sa}^{ik}-j_{ik}}^{(n_i-j_s+1)}$$

GÜLDÜZMAYA

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$

$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$

$D + s - n < l_i \leq D + l_{sa} + s - n - j_{sa}^{ik} \vee$

$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$

$(n \geq n < n \wedge I = \mathbb{k} > 0)$

$j_{sa} \leq j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$\geq 5 \wedge s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(l_{sa}+n+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-l+1}$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_{ik}-l_{k_1}+1) \\ (n_{ik}=n+l_{k_2}-j_{ik}+1)}} \sum_{\substack{n_{ik}+j_{ik}-j^{sa}-l_{k_2} \\ n_{sa}=n-j^{sa}+1}} \\
 & \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{l=1}^{(l_s + j_{sa}^{ik})} \sum_{\substack{j_{sa}^{ik} - D - j_{sa} \\ j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}} \sum_{l_{sa}=l+1}^{l_{sa}-l+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_{ik}-l_{k_1}+1) \\ (n_{ik}=n+l_{k_2}-j_{ik}+1)}} \sum_{\substack{n_{ik}+j_{ik}-j^{sa}-l_{k_2} \\ n_{sa}=n-j^{sa}+1}} \\
 & \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -
 \end{aligned}$$

GÜLDÜŞÜK

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)} j_{sa}^{sa=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-s)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k1}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-l_{k2})}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - l_{k1})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot l_k)! \cdot (n_{is} - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik})! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - 1)!}{(D + j^{sa} + s - n - j_{sa}^{ik} - j_{sa}^{ik} - j_{sa}^{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1) \vee$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_{sa} + j_{sa}^{ik} - j_{sa} \wedge l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa}^{ik} + 1 > l_s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D + j_{sa} - n < l_i \leq D + l_{sa} + s - n - j_{sa}) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_{z \neq j_{sa}^{sa}} = \sum_{k=l}^{n+1} \sum_{(j_{ik} = n-D)}^{j_{sa} + j_{sa}^{ik} - j_{sa} - k + j_{sa} - l - j_{sa}^{ik} + 1} \sum_{j_{sa} = l_{sa} + n - D}^{n - k + j_{sa} - l - j_{sa}^{ik} + 1}$$

$$\sum_{i=n+k}^n \sum_{(n_{ik} = n+k_2 - j_{ik} + 1)}^{j_{ik} - k_1 + 1} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{ik} + j_{ik} - j_{sa} - k_2}$$

$$\frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} +$$

GÜLDÜZMÜNYA

$$\begin{aligned}
 & \sum_{k=l} \sum_{(j_{ik}=l_{ik}+n-D)}^{(l_{ik}-l+1)} \sum_{(j_{sa}=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2)}^{l_{sa}-l+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{(n_{sa}=n-j_{sa}+j_{sa}^{ik})}^{n_{ik}+j_{ik}-j_{sa}^{ik}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{sa} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(n_i + j_{sa} - n - 1)! \cdot (n - j_{sa}^{ik} - 1)!}{(n_i - j_{ik} - l_{k_1} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + j_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - j_{sa}^{ik} - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \\
 & \sum_{k=l} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})}^{( )} \sum_{(j_{sa}=l_i+n+j_{sa}-D-s)}^{l_s+j_{sa}-l} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-l_{k_2})}^{( )} \\
 & \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - s - j_{sa}^{ik} - 2 \cdot l_k)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot l_k)! \cdot (n - s)!} \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \\
 & \frac{(D - l_i)!}{(D + j_{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}
 \end{aligned}$$

GÜLDEN



$$\left( (D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \wedge$$

$$D + s - n < l_i \leq D + l_{sa} + s - n - j_{sa}) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \wedge$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
 f_{z} S_{j_{ik}, j_{sa}}^{DOST} = & \sum_{k=l}^{(l_{sa}+n+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{(j_{ik}=l_{ik}+n-D)}^{l_{sa}-l+1} \sum_{j_{sa}=l_{sa}+n-D} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \\
 & \frac{(l_{ik} - j_{sa} - 1)!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + j_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - l_{sa} - s)! \cdot (n + j_{sa} - j_{sa} - s)!} + \\
 & \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})}^{(l_{ik}-l+1)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{l_{sa}-l+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
 \end{aligned}$$

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$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)} j_{sa} = j_{sa} + j_{sa} - j_{sa}^{ik}$$

$$\sum_{n=n+k}^n \sum_{(n_{is} = n - j_{ik})}^{(n_i - k + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^{ik} - k_1}^{( )} \sum_{(n_{ik} = j_{sa} - k_2)}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - s - j_{sa}^{ik} - 2 \cdot k)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - s - 2 \cdot j_{sa}^{ik} - 2 \cdot k)! \cdot (n - s)!}$$

$$\frac{(D - l - 1)!}{(D + j_{sa} - n - l - j_{sa})! \cdot (j_{ik} - j_{sa}^{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j_{sa} + n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

- $((D \geq n < n \wedge l = l \wedge l_s \leq D - n + 1 \wedge$
- $j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$
- $j_{ik} - j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - s \wedge$
- $l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$
- $D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1) \vee$
- $(D \geq n < n \wedge l \neq l_i \wedge l_s \leq D - n + 1 \wedge$
- $j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$
- $j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - s \wedge$
- $l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$
- $D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1 \wedge$
- $D + s - n < l_i \leq D + l_{sa} + s - n - j_{sa}) \vee$

$$(D \geq n < n \wedge l \neq i_l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(\quad)} \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\quad)} \sum_{j_{sa}^{ik}=l_i+n+j_{sa}-D-j_{sa}}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \\ \sum_{n_i=n+\mathbb{k}}^{(n_i-j_{sa}^{ik}-\mathbb{k}_1+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{n_{sa}=n-j^{sa}+1}^{(\quad)} \\ \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\ \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\ \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\ \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\ \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \\ \sum_{k=l}^{(\quad)} \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\quad)} \sum_{j_{sa}^{ik}=l_i+n+j_{sa}-D-s}^{l_s+j_{sa}-l}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n-s)!}$$

$$\frac{(l_s - l_i - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - j_{sa}^{ik})! \cdot (n_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l = i \wedge l_{sa} \leq D + j_{sa} - n$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{ik} < j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s - \mathbb{k} \wedge$$

$$\mathbb{k}_2 = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j^{sa}}^{DOST} = \left( \sum_{k=i}^l \sum_{(j_{ik}=j_{sa}^{ik})}^{( )} \sum_{j^{sa}=j_{sa}} \right)$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!} \Bigg) +$$

$$\left( \sum_{k=i}^{l} \sum_{\binom{()}{j_{ik}=j_{sa}^{ik}}} \sum_{j^{sa}=j_{sa}^{i,l+1}}^{l_{sa}-i,l+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{\binom{()}{n_{ik}=n+l_k-j_{ik}+1}}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2}}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}}$$

$$\frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - n_{ik} - l_{k_1} + 1)! \cdot (n_i - n_{ik} - l_{k_1} + 1)!}$$

$$\frac{(n_i - n_{sa} - j_{ik} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_i - n_{sa} - j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{sa} - j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \Bigg) -$$

$$\sum_{k=i}^{l} \sum_{\binom{()}{j_{ik}=j_{sa}^{ik}}} \sum_{j^{sa}=j_{sa}}$$

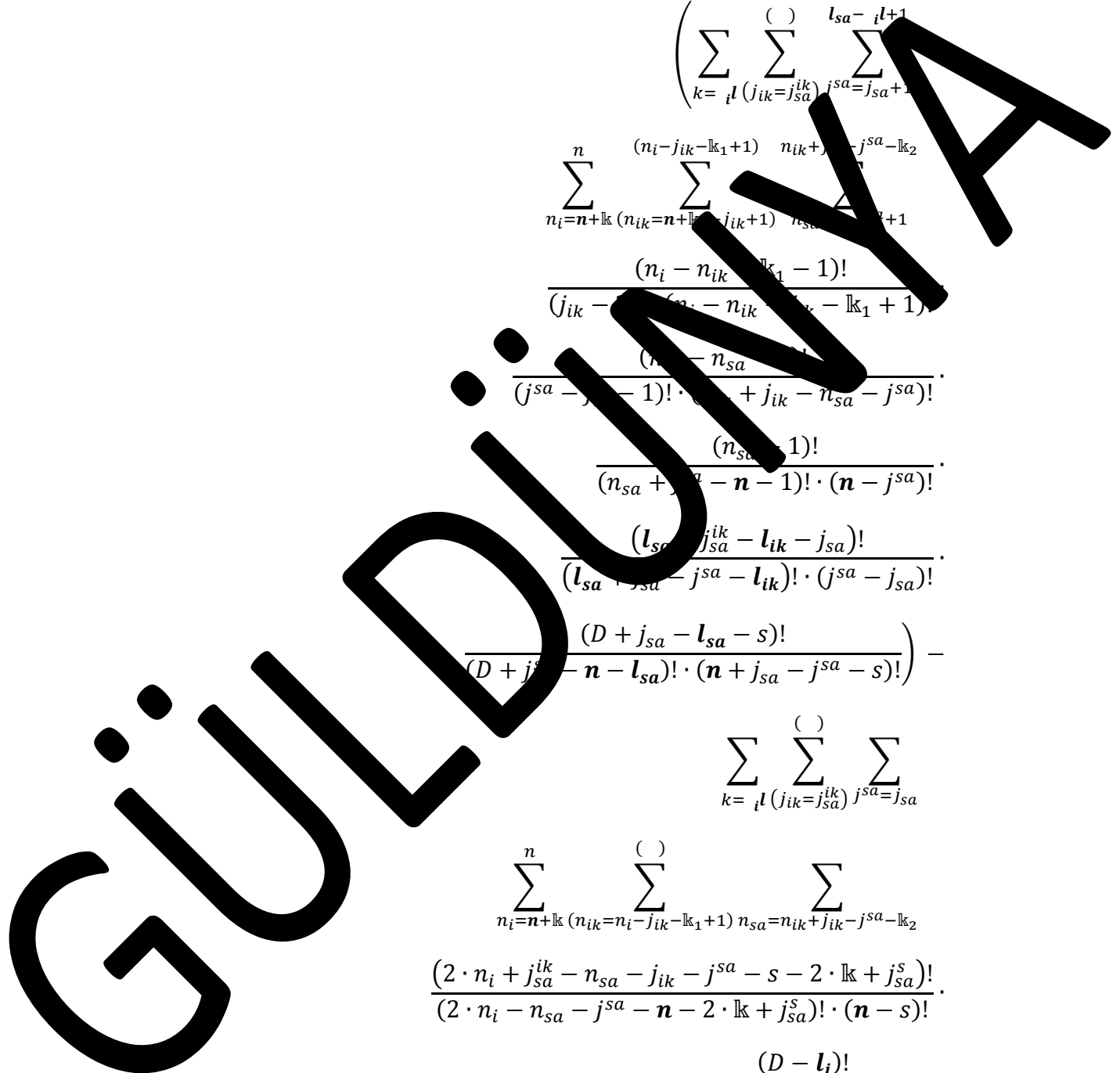
$$\sum_{n_i=n+l_k}^n \sum_{\binom{()}{n_{ik}=n_i-j_{ik}-l_{k_1}+1}}^{() } \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2}}$$

$$\frac{(2 \cdot n_i + j_{sa}^{ik} - n_{sa} - j_{ik} - j^{sa} - s - 2 \cdot l_k + j_{sa}^s)!}{(2 \cdot n_i - n_{sa} - j^{sa} - n - 2 \cdot l_k + j_{sa}^s)! \cdot (n - s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l = i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$



$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge l_i \leq D + s - n \wedge$$

$$D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z^{DOST} S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=1}^{l_{sa}-i^l} \sum_{j_{sa}^i=j_{sa}}^{l_{sa}-i^l} \sum_{n_i=n+k}^n \sum_{n_{ik}=n_i-j_{ik}-k_1+1}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n_{ik}+j_{ik}-j_{sa}-k_2}^{n_{ik}+j_{ik}-j_{sa}-k_2} \frac{(n_i - j_{ik} - k_1 - 1)!}{(j_{ik} - n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa}^i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - i^l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i^l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=1}^{i^l} \sum_{(j_{ik}=j_{sa}^{ik})}^{( )} \sum_{j_{sa}^i=j_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{ik}=n_i-j_{ik}-k_1+1)}^{( )} \sum_{n_{sa}=n_{ik}+j_{ik}-j_{sa}-k_2}$$

$$\frac{(2 \cdot n_i + j_{sa}^{ik} - n_{sa} - j_{ik} - j^{sa} - s - 2 \cdot \mathbb{k} + j_{sa}^s)!}{(2 \cdot n_i - n_{sa} - j^{sa} - n - 2 \cdot \mathbb{k} + j_{sa}^s)! \cdot (n - s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l = {}_i l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\sum_{k=0}^{D-s} \sum_{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}^{(j_{ik}-\mathbb{k}_1+1)} \sum_{j_{sa}=j_{sa}}^{l_{sa}-i^{l+1}} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - {}_i l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - {}_i l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!}$$



$$\sum_{k=1}^n \sum_{i|l}^{( )} \sum_{j^{sa}=j_{sa}}^{j_{ik}=j_{sa}^{ik}}$$

$$\sum_{n_i=n+l}^n \sum_{(n_{ik}=n_i-j_{ik}-l_{k_1}+1)}^{( )} \sum_{n_{sa}=n_{ik}+j_{ik}-j_{sa}}^{( )}$$

$$\frac{(2 \cdot n_i + j_{sa}^{ik} - n_{sa} - j_{ik} - j^{sa} - s - 2 \cdot l_{k_1} + j_{sa}^{ik})!}{(2 \cdot n_i - n_{sa} - j^{sa} - n - 2 \cdot l_{k_1} + j_{sa}^{ik})! \cdot (n - s)!}$$

$$\frac{(D - l_{k_1})!}{(D + s - l_{k_1} - l)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l = i|l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{k_1} \wedge$$

$$D \geq n < n \wedge l = l_{k_1} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{ik} \leq j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, l_{k_2}, j_{sa}, \dots, l_{k_2}\} \wedge$$

$$s \geq 5 \wedge s = s + l_{k_1} \wedge$$

$$l_{k_2}: z \geq 2 \wedge l_{k_2} = l_{k_1} \wedge l_{k_2} \Rightarrow$$

$$\sum_{k=1}^n \sum_{i|l}^{( )} \sum_{j^{sa}=j_{sa}}^{l_{ik}+j_{sa}-l_{k_1}-j_{sa}^{ik}+1} j_{ik}^{j_{sa}} = \sum_{k=1}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{( )} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-l_{k_2}}$$

$$\frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - i l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!}$$

$$\sum_{k=i}^{( )} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j_{sa}=j_{sa}^{ik}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n_i-j_{sa}-l_{k_2}}$$

$$\frac{(2 \cdot n_i + j_{sa}^{ik} - n_{sa} - j_{ik} - j_{sa}^{ik} - s - 2 \cdot l_k + j_{sa}^{ik})!}{(2 \cdot n_i - n_{sa} - j_{sa}^{ik} - s - 2 \cdot l_k + j_{sa}^{ik})! \cdot (n - s)!}$$

$$(D + j_{sa} - n - l_i)! \cdot (n - s)!$$

$$D \geq n < n \wedge l = i l \wedge l_s \leq D - n + 1$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D \geq n < n \wedge l = i l > 0 \wedge$$

$$j_{sa}^{ik} \leq j_{sa} - j_{sa}^{ik} = j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^{ik}, \dots, l_{k_1}, j_{sa}^{ik}, \dots, j_{sa}^{ik}, \dots, l_{k_2}\}$$

$$s \geq 5, l_{k_1} = s + l_{k_2} \wedge$$

$$l_{k_2}: z = 2 \wedge l_{k_2} = l_{k_1} + 1 \Rightarrow$$

$$f_Z S_{j_{ik}, j_{sa}^{ik}}^{DOST} = \sum_{k=i}^{(l_{sa}+j_{sa}^{ik}-i l-j_{sa}+1)} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-l_{k_2}} \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_{ik} - i^l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i^l + 1)! \cdot (j_{ik} - j_{sa}^{ik})!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!}$$

$$\sum_{k=1}^n \sum_{(j_{ik}=j_{sa}^{ik})} j_{sa}^{ik}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_i - j_{ik} - l_{sa} = 1)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}$$

$$\frac{(2 \cdot n_i + j_{sa}^{ik} - n_{sa} - j^{sa} - s - 2 \cdot l_k + j_{sa}^s)!}{(2 \cdot n_i + n_{sa} - j^{sa} - n - 2 \cdot l_k + j_{sa}^s)! \cdot (n - s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l = i^l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{sa}^{ik} + j_{sa} - j_{sa} \leq j^{sa} \leq j_{sa}^{ik} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} = l_{ik} \wedge$$

$$D \geq n < n \wedge l = l_k > 1 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^i, \dots, j_{sa}^{ik}, l_{k_2}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + l_k \wedge$$

$$l_{k_2}: z = 2 \wedge l_k = l_{k_1} + l_{k_2} \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=i^l}^{(l_{ik}-i^{l+1})} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - j_{ik} - l + j_{sa})!}{(l_{ik} - j_{ik} - l + j_{sa} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(j_{sa} - l - s)!}{(D + s - n - l)! \cdot (n - s)!}$$

$$\sum_{k=i}^{( )} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{( )} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(2 \cdot n_i + j_{sa}^i - n_{sa} - j_{ik} - j^{sa} - s - 2 \cdot \mathbb{k} + j_{sa}^s)!}{(2 \cdot n_i - n_{sa} - j^{sa} - n - 2 \cdot \mathbb{k} + j_{sa}^s)! \cdot (n - s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l = l_i \wedge l_i \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa}^i + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} - j_{sa}^{ik} - j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + j_{sa} > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$l_{ik} - j_{sa}^{ik} - n \wedge l_i \leq D + s - n \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j^{sa}}^{DOST} = \sum_{k=i}^l \sum_{(j_{ik}=j_{sa}^{ik})}^{(l_{sa}+j_{sa}^{ik}-i-l-j_{sa}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{ik}}^{n_{ik}+j_{ik}-j^{sa}-1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-1}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - n_{sa} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(n - i - l - j_{sa}^{ik})!}{(n_{ik} - j_{ik} - n_{sa} + j_{sa} - l_{sa} - s)!}$$

$$\frac{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!}{(2 \cdot n_i + j_{sa}^{ik} - n_{sa} - j_{ik} - j^{sa} - s - 2 \cdot \mathbb{k} + j_{sa}^s)! \cdot (2 \cdot n_i - n_{sa} - j^{sa} - n - 2 \cdot \mathbb{k} + j_{sa}^s)! \cdot (n - s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$(D \geq n < n \wedge l = i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l = {}_i l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$l_{sa} \leq D + j_{sa} - n \wedge l_i \leq D + s - n)) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{i=l}^{(l_{ik} - i l + 1)} \sum_{(j_{ik} = j_{sa}^{ik})}^{l_{sa} - i l + 1} \sum_{j_{sa} = j_{sa}}^{(l_{sa} - i l + 1)}$$

$$\sum_{n+\mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - i l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=1}^n \sum_{i|l}^{( )} \sum_{j^{sa}=j_{sa}}^{( )} j_{sa}^{ik}$$

$$\sum_{n_i=n+l}^n \sum_{(n_{ik}=n_i-j_{ik}-l_{k_1}+1)}^{( )} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}}^{( )}$$

$$\frac{(2 \cdot n_i + j_{sa}^{ik} - n_{sa} - j_{ik} - j^{sa} - s - 2 \cdot l_{k_1} + j_{sa}^{ik})!}{(2 \cdot n_i - n_{sa} - j^{sa} - n - 2 \cdot l_{k_1} + j_{sa}^{ik})! \cdot (n - s)!}$$

$$\frac{(D - l_{k_1})!}{(D + s - l_{k_1})! \cdot (n - s)!}$$

$$D \geq n < n \wedge l = i|l \wedge l_{sa} \leq D + j_{sa} - n \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{k_1} \wedge$$

$$D \geq n < n \wedge l = l_{k_1} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{ik} \leq j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, l_{k_2}, j_{sa}, \dots, l_{k_1}\} \wedge$$

$$s \geq 5 \wedge s = s + l_{k_1} \wedge$$

$$l_{k_2}: z \geq 2 \wedge l_{k_2} = l_{k_1} \wedge l_{k_2} \Rightarrow$$

$$j_{ik}^{sa} = \left( \sum_{k=1}^n \sum_{i|l}^{( )} \sum_{j^{sa}=j_{sa}}^{( )} \frac{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}{j_{sa}^{ik}}$$

$$\sum_{n_i=n+l}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}}$$

$$\frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - i l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!} +$$

$$\left( \sum_{k=i l}^{(j^{sa} + j_{sa}^{ik} - j_{sa} - 1)} \sum_{(j_{ik} = j_{sa}^{ik})} \sum_{j_{sa}^{sa+1}}^{l_{ik} + j_{sa} - i l - j_{sa}^{ik}} \right)$$

$$\sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j_{sa} - k_2}^{n_{ik} + j_{ik} - j_{sa} - k_2}$$

$$\frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - i l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa} - j_{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=i l}^{(l_{ik} - i l + 1)} \sum_{(j_{ik} = j_{sa}^{ik})} \sum_{j_{sa} = l_{ik} + j_{sa} - i l - j_{sa}^{ik} + 2}^{l_{sa} - i l + 1}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - k_2}$$

$$\frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

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$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - i^l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i^l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=0}^{\lfloor \frac{n_{sa}}{2} \rfloor} \sum_{\substack{j_{ik}=j_{sa}^{ik} \\ j^{sa}=j_{sa}}} \sum_{\substack{n_i=n+l_k \\ (n_{ik}+j_{ik}-l_{k_1})+n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2}}} \frac{(2 \cdot n_i + j_{sa}^{ik} - n_{sa} - j^{sa} - 2 \cdot k + j_{sa}^s)!}{(2 \cdot n_i - n_{sa} - j^{sa} - n + 2 \cdot k + j_{sa}^s)! \cdot (n - s)!} \cdot \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l = i^l \wedge l_{sa} \leq D - i_{sa} - n \wedge$$

$$j_{sa}^{ik} \leq j_{sa}^{sa} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} - 1 \leq j^{sa} - n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge j_{sa}^{ik} + j_{sa}^{sa} > l_{ik} \wedge$$

$$n \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^{sa} - 1 \wedge j_{sa}^{ik} - j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$n \geq 5 \wedge s = s + k \wedge$$

$$k_2: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \left( \sum_{k=i^l}^{(l_{ik} - i^l + 1)} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_{ik}-l_{k_1}+1) \\ (n_{ik}=n+l_{k_2}-j_{ik}+1)}} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - i l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \left( \frac{(j_{ik} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa} - s)!} \right) + \\
 & \left( \sum_{k=i l}^{(l_{ik} - i l)} \sum_{j_{sa}^{ik}}^{l_{sa} - i l + 1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1} \right) \\
 & \sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_{ik}-l_{k_1}+1) \\ (n_{ik}=n+l_{k_2}-j_{ik}+1)}} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - i l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \left( \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) -
 \end{aligned}$$

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$$\sum_{k=1}^n \sum_{i|l}^{( )} (j_{ik}=j_{sa}^{ik}) \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{( )} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}}$$

$$\frac{(2 \cdot n_i + j_{sa}^{ik} - n_{sa} - j_{ik} - j^{sa} - s - 2 \cdot \mathbb{k} + j_{sa}^i)!}{(2 \cdot n_i - n_{sa} - j^{sa} - n - 2 \cdot \mathbb{k} + j_{sa}^s) \cdot (n-s)!}$$

$$\frac{(D - l_i)!}{(D + s - l_i - 1)! \cdot (n-s)!}$$

$$D \geq n < n \wedge l = i|l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - j_{sa}^{ik} > l_{sa} \wedge$$

$$l_i \leq D + s - n \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\}$$

$$s \geq 5 \bullet s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z \cdot z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2$$

$$f_z S_{j_{ik}, j^{sa}}^{DOST} = \sum_{k=1}^n \sum_{i|l}^{( )} (j_{ik}=j_{sa}^{ik}) \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!}$$

$$\sum_{k=i}^{(\cdot)} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{sa}^{ik}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n_i-j_{ik}-l_{k_1}+1)}^{(\cdot)} \sum_{n_{sa} \dots j_{ik} \dots a-l_{k_2}}$$

$$\frac{(2 \cdot n_i + j_{sa}^{ik} - n_{sa} - j_{ik} - j_{sa}^{ik} - s - 2 \cdot l_{k_1} + l_{k_2})!}{(2 \cdot n_i - n_{sa} - j_{sa}^{ik} - n - 2 \cdot l_{k_1} + l_{k_2} + j_{sa}^{ik})! \cdot (n - s)!}$$

$$\frac{(D - 1)!}{(D + s - n - l_{sa})! \cdot (n - s)!}$$

$$((D \geq n < n \wedge l = i l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - s \wedge l_i \leq D + s - n \vee$$

$$(D \geq n < n \wedge l = i l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l = i l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_{zS}^{DOST}_{j_{ik}, j_{sa}} = \sum_{k=1}^{(\quad)} \sum_{i=1}^{(j_{sa} - i l + 1)} \sum_{j_{sa} = j_{sa}}^{(\quad)}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{n_{ik} = n_i - j_{ik} - \mathbb{k}_1 + 1}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n_{ik} + j_{ik} - \mathbb{k}_2}^{n_{ik} + j_{ik} - \mathbb{k}_2}$$

$$\frac{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}{(n_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(j_{sa} - n - 1)! \cdot (n - j_{sa})!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - j_{sa} - l_{ik})! \cdot (j_{sa} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=1}^{(\quad)} \sum_{i=1}^{(j_{sa} - i l + 1)} \sum_{j_{sa} = j_{sa}}^{(\quad)}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{n_{ik} = n_i - j_{ik} - \mathbb{k}_1 + 1}^{(\quad)} \sum_{n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2}^{(\quad)}$$

$$\frac{(2 \cdot n_i + j_{sa}^{ik} - n_{sa} - j_{ik} - j_{sa} - s - 2 \cdot \mathbb{k} + j_{sa}^s)!}{(2 \cdot n_i - n_{sa} - j_{sa} - n - 2 \cdot \mathbb{k} + j_{sa}^s)! \cdot (n - s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik})) \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2$$

$$\sum_{k=l}^n \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{j^{sa}=l_{sa}+n-D}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\left( \sum_{k=l}^{j^{sa} + j_{sa}^{ik} - j_{sa} - 1} \sum_{(j_{ik} = l_{ik} + n - D)} \sum_{j^{sa} = l_{sa} + n - D}^{n_{ik} + j_{ik} - j_{sa}^{ik} + 1} \right)$$

$$\sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa}}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l_{sa}^{ik})!}{(l_{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{ik} - j_{sa}^{ik})!}{(j_{ik} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l}^{(l_{ik} - l + 1)} \sum_{(j_{ik} = l_{ik} + n - D)} \sum_{j^{sa} = l_{sa} - l + 1}^{n_{ik} + j_{ik} - j^{sa} - k_2}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - k_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{( )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{l_{ik}+j_{sa}^{ik}-j_{sa}^{ik}+1} \sum_{(l+n+j_{sa}^{ik}-D-s)}^{(n+l)}$$

$$\sum_{(n+l)}^{(n-l_{sa}+1)} \sum_{(n_{is}+l+k+j_{sa}^{ik}-j_{ik})}$$

$$n_{ik}=n_{is}+j_{sa}^{ik}-l_{k_1} \quad (n_{ik}+j_{ik}-j^{sa}-l_{k_2})$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^{ik} - n_{sa} - j^{sa} - j_{sa}^{ik} - 2 \cdot l_{k_1})!}{(2 \cdot n_{is} + 2 \cdot j_{sa}^{ik} + n_{sa} - j^{sa} - n - j_{sa}^{ik} - 2 \cdot l_{k_1})! \cdot (n - s)!}$$

$$(l_s - l - 1)!$$

$$(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!$$

$$(D - l_i)!$$

$$(D + j_{sa}^{ik} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 2 \leq l \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik}) \vee$$

$$(D < n \wedge l_s > D - n + 1 \wedge$$

$$D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 2 \leq l \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$



$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \Big) \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^l\} \wedge$$

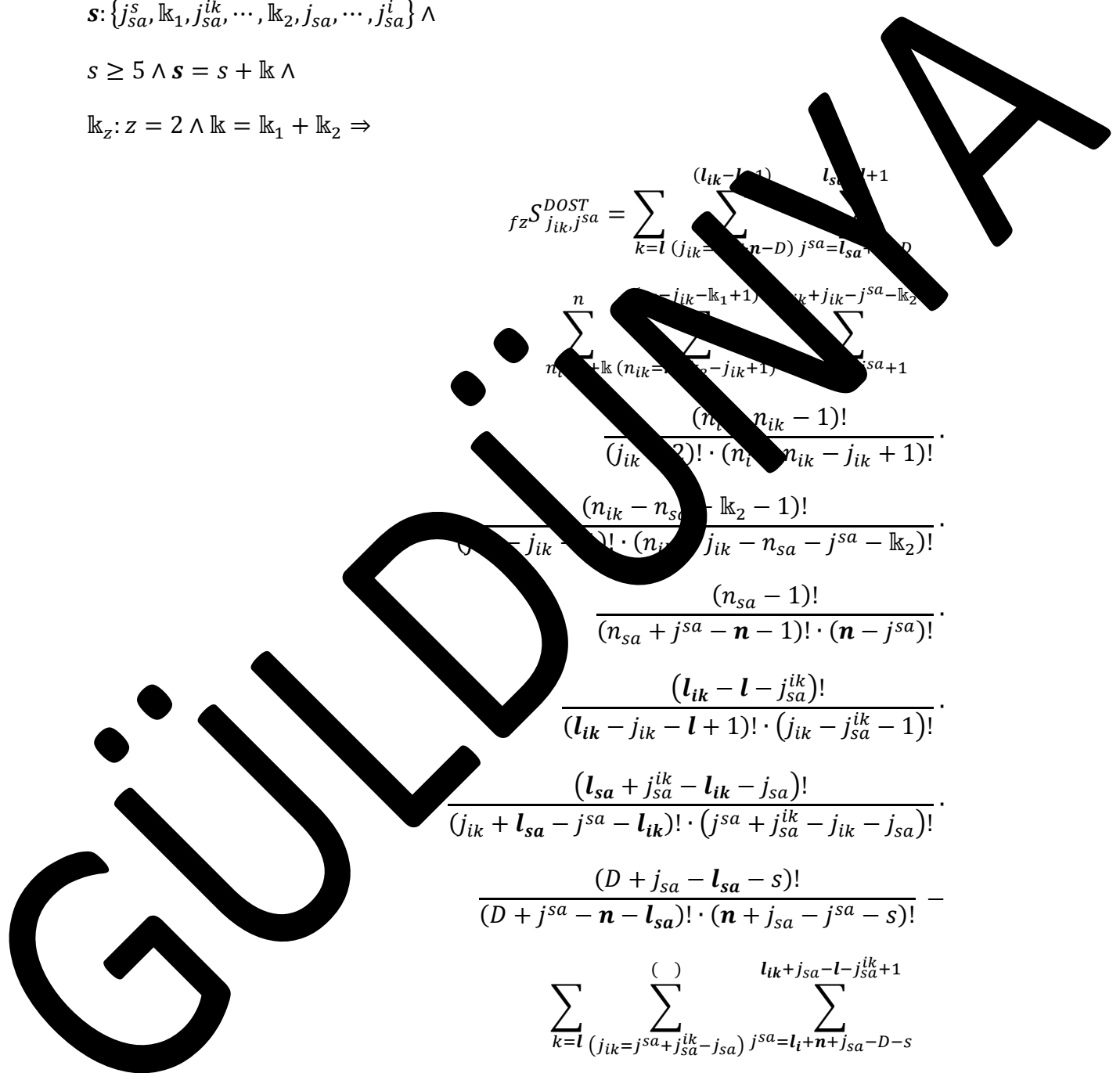
$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z^{S_{j_{ik} j_{sa}^{DOST}}} = \sum_{k=l}^{(l_{ik}-l+1)} \sum_{j_{sa}^{sa} = l_{sa}^{sa} - D}^{l_{sa}^{sa} + 1} \sum_{n_i = n + k}^n \sum_{n_{is} = n + k + j_{sa}^{ik} - j_{ik} - k_2}^{n - j_{ik} - k_1 + 1} \sum_{j_{sa}^{sa} = j_{sa}^{sa} + 1}^{n_{is} - j_{ik} + 1} \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_{is} - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(n_{is} - j_{ik} - n_{sa} - j_{sa} - k_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l} \sum_{(j_{ik} = j_{sa} + j_{sa}^{ik} - j_{sa})} \sum_{l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1}^{(n_i - j_s + 1)} j_{sa}^{sa} = l_i + n + j_{sa} - D - s$$

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)}$$



$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{\binom{()}{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}} \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - l)!} \cdot \frac{(D - l_j)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$((D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \vee$

$(D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \vee$

$D \geq n < n \wedge I = \mathbb{k} = 0 \wedge$

$j_{sa}^s \leq j_{sa}^{l-1} \wedge j_{sa}^{ik} < j_{sa}^{l-1} \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^{s-1}, j_{sa}^{ik}, \dots, j_{sa}^i\} \wedge$

$s \geq 5 \wedge s \leq s + \mathbb{k} \wedge$

$z = 2 \cdot \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \left( \sum_{k=l} \sum_{\binom{(l_{ik}-l+1)}{j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa}}} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\begin{aligned}
& \sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_{ik}-l_{k_1}+1) \\ (n_{ik}=n+l_{k_2}-j_{ik}+1)}} \sum_{\substack{n_{ik}+j_{ik}-j^{sa}-l_{k_2} \\ n_{sa}=n-j^{sa}+1}} \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \left( \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \right. \\
& \left. \left( \sum_{k=l}^n \sum_{\substack{(n_i-j_{ik}-l_{k_1}+1) \\ (n_{ik}=n+l_{k_2}-j_{ik}+1)}} \sum_{\substack{n_{ik}+j_{ik}-j^{sa}-l_{k_2} \\ n_{sa}=n-j^{sa}+1}} \right) \right. \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \right)
\end{aligned}$$

$$\begin{aligned}
 & \sum_{k=l} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{lk}-D-j_{sa})}^{(l_{ik}-l+1)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{lk}+1)}^{l_{sa}-l+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} + j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_i + j^{sa} - n - 1)! \cdot (n - j^{sa} - 1)!}{(n_i - j_{ik} - l_{k_1} + 1)! \cdot (j_{ik} - l_{sa} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{ik} - l_{ik} - j_{sa})!}{(j_{ik} + j_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{lk} - j_{ik} - j_{sa})!} \cdot \\
 & \left( \frac{(D + j_{sa} - n_{sa} - s)!}{(D + j_{sa} - n_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) - \\
 & \sum_{k=l} \sum_{(j_{ik}=l_i+n+j_{sa}^{lk}-D-s)}^{(l_{ik}-l+1)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{lk})} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{lk}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{lk}-l_{k_1}} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{(\quad)} \\
 & \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{lk} - 2 \cdot l_k)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{lk} - 2 \cdot l_k)! \cdot (n - s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{lk} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{lk} - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

GÜLDEN

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_{z, j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^n \binom{n}{j_{ik} + j_{sa}^{ik} - k} \sum_{j_{sa} = l_{sa} + n - D}^{j_{sa} - l} \binom{n}{j_{sa} - j_{sa}^{ik} - k} \sum_{n_i = n + \mathbb{k}}^n \binom{n_i - j_{ik} - \mathbb{k}_1 + 1}{n_{ik} - n + \mathbb{k}_2 - j_{ik} + 1} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \Bigg) + \left( \sum_{k=l}^{j_{sa} + j_{sa}^{ik} - j_{sa} - 1} \sum_{j_{sa} = l_{sa} + n - D}^{l_s + j_{sa} - l} \binom{l_s + j_{sa} - l}{j_{sa} = l_{sa} + n - D} \right)$$

$$\sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_{ik}-l_{k_1}+1) \\ (n_{ik}=n+l_{k_2}-j_{ik}+1)}} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l}^{(l_{s+1} - l)} \sum_{j_{sa}^{ik}=n+l_{sa}-D-1}^{l_{sa}-l+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_{ik}-l_{k_1}+1) \\ (n_{ik}=n+l_{k_2}-j_{ik}+1)}} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

GUIDE

$$\begin{aligned}
 & \sum_{k=l} \sum_{(j_{ik}=l_s+n+j_{sa}^{ik}-D-1)}^{(l_s+j_{sa}^{ik}-l)} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-l+1} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} + j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_i - 1)!}{(n_i + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - j_{ik})!}{(l_{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - 1)!}{(j_{ik} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \left( \frac{(D + j_{sa} - n - s)!}{(D + j_{sa} - n - s)! \cdot (n + j_{sa} - j^{sa} - s)!} \right) - \\
 & \sum_{k=l} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})}^{( )} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_s+j_{sa}-l} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1}^{( )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{( )} \\
 & \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n - s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

GÜLDÜZ

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 2 \leq l \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_{z, j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_s - j_{sa}^{ik} - l)} \sum_{j_{ik}=n+j_{sa}^{ik}-D+1}^{(n - j_{sa}^{ik} - \mathbb{k}_1 + 1)} \sum_{j_{sa}=l_{sa}+n-D}^{(n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)} \sum_{n_{sa}=n-j_{sa}+1}^{(n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \cdot$$



$$\frac{\sum_{k=l}^{(l_s+j_{sa}^{ik}-l)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)} j^{sa} = j_{ik}+j_{sa}-j_{sa}^{ik}}{\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-n_{sa})}^{(n_i-j_s+1)} \sum_{(n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1)}^{(\cdot)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(\cdot)} \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)! \cdot (n_{is} - s)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)! \cdot (n_{is} - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l - 1)!}{(D + j^{sa} + s - n - j_{sa}^{ik} - j_{sa} - j^{sa} - s)!}}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq l \leq D + l_{ik} + j_{sa} - n - j_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa} + 1 = l_s \wedge l_{ik} + j_{sa}^{ik} - j_{sa} > 0 \wedge$$

$$D \geq n < n \wedge l_s > 0 \wedge$$

$$j_{sa} \leq l_s - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa} = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, \dots, \mathbb{k}_2, j_s, \dots, j_{sa}^l\} \wedge$$

$$s \geq l_s = s + \mathbb{k}_1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k}_z = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik} j^{sa}}^{DOST} = \left( \sum_{k=l}^{(l_s+j_{sa}^{ik}-l)} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})} j^{sa} = j_{ik}+j_{sa}-j_{sa}^{ik} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \right)$$

$$\begin{aligned}
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa})!}{(D + j^{sa} - n - l_{sa})! \cdot (D + j_{sa} - j_{sa}^{ik})!} + \\
 & \left( \sum_{j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa}}^{l_{sa}-l+1} \sum_{j_{sa}^{ik}=j_{sa}^{ik}-D-1}^{l_{sa}-l+1} \sum_{n-D}^{n-D} \right) \cdot \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_{sa}-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_2)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \cdot \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{k=l} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})}^{(l_s+j_{sa}^{ik}-l)} \sum_{j_{sa}^{ik}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{l_{sa}-l+1}
 \end{aligned}$$

GÜLDENWA

$$\begin{aligned}
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{\substack{(n_i-j_{ik}-\mathbb{k}_1+1) \\ (n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}} \sum_{\substack{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2 \\ n_{sa}=n-j^{sa}+1}} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l - l - j_{sa})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} - l_{sa} - j_{sa})!}{(j_{ik} + j_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} - j_{sa}^{ik} - j_{sa})!} \cdot \\
 & \left( \frac{(D + j_{sa} - l_{sa} - s)!}{(n + j^{sa} - n - l_{sa})! \cdot (n + j^{sa} - j^{sa} - s)!} \right) \cdot \\
 & \sum_{k=l}^{(l_s+j_s-1)} \sum_{\substack{j_{ik}=l_i+n+j_{sa}^{ik}-D-s \\ j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)} \\
 & \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n - s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 \geq l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(\quad)} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})}^{l_{ik}+j_{sa}-j_{sa}^{ik}+1} \sum_{(j_{sa}=l_{sa}+n-D)}^{(\quad)} \sum_{(n_i=n+\mathbb{k}_1)}^{(\quad)} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{sa}-\mathbb{k}_2)}^{(\quad)} \sum_{(n_{sa}=n-j_{sa}+1)}^{(\quad)}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_i - \mathbb{k}_2 - 1)!}{(j_{sa} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

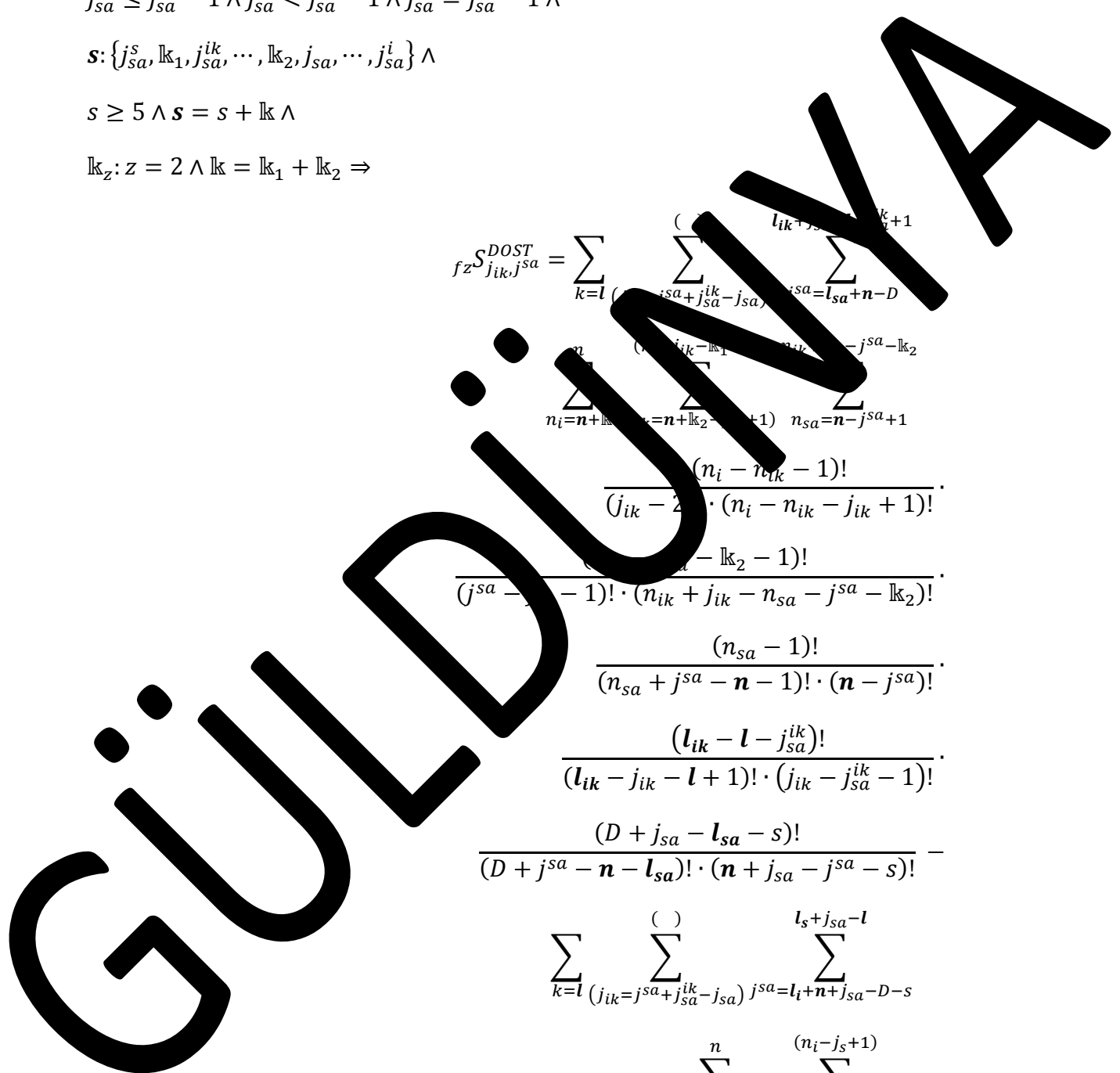
$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(\quad)} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})}^{(\quad)} \sum_{(j_{sa}=l_i+n+j_{sa}-D-s)}^{l_s+j_{sa}-l}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1}^{(\quad)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}$$



$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - \mathbf{n} - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (\mathbf{n} - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - \mathbf{n} - l_i - j_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!}$$

$$D \geq \mathbf{n} < \mathbf{n} \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 \geq l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D \geq \mathbf{n} < \mathbf{n} \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 =$$

$$j_{sa}^{DOST} = \sum_{j_{sa}^{ik}} \binom{()}{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{j^{sa}=l_{ik}+\mathbf{n}+j_{sa}-D-j_{sa}^{ik}} \binom{l_{sa}-l+1}{j^{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^{\mathbf{n}} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l} \sum_{\binom{()}{j_{ik}=j^{sa}+j_{sa}^{lk}-j_{sa}}} \sum_{l_s+j_{sa}-l} j^{sa} = l_i + n + j_{sa} - D - s$$

$$\sum_{n_i=n+l_k}^n \sum_{\binom{()}{n_{is}=n+l_k+j_{sa}^{lk}-j_{sa}}} (n_i - j_s + 1)$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s - j_{sa}^{lk} - l_{k_1}} \sum_{\binom{()}{n_{sa}=n_{ik}+j_{sa}^{lk} - j_{sa} - l_{k_2}}}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{lk} - l_{k_1})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{lk} - 2 \cdot l_{k_1})! \cdot (n_{is} - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{lk} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{lk} - 1)!}$$

$$\frac{(D - 1)!}{(D + j^{sa} + s - n - j_{sa}^{lk} - j_{sa} - j^{sa} - s)! \cdot (l_s + j_{sa} - j^{sa} - s)!}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$j_{sa}^{lk} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{lk} - j_{sa} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{lk} \leq j^{sa} \leq n + j_{sa}^{lk} - s \wedge$

$l_{ik} - j_{sa}^{lk} + 1 \geq l_s \wedge l_{sa} + j_{sa}^{lk} - j_{sa} = l_{ik} \wedge$

$D \geq n < n \wedge I = l_{k_1} = 0 \wedge$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{lk} < j_{sa} - 1 \wedge j_{sa}^s - j_{sa}^{lk} - 1 \wedge$

$s: \{j_{sa}^{lk_1}, j_{sa}^{lk_2}, \dots, j_{sa}^{lk_z}, \dots, j_{sa}^l\} \wedge$

$s \geq 5 \wedge s \leq s + l_k \wedge$

$l_{k_z}: z \geq 2 \wedge l_k = l_{k_1} + l_{k_2} \Rightarrow$

$$fz_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l} \sum_{\binom{()}{j_{ik}=l_{sa}+n+j_{sa}^{lk}-D-j_{sa}}} \sum_{(l_{ik}-l+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{lk}}$$

$$\sum_{n_i=n+l_k}^n \sum_{\binom{()}{n_{ik}=n+l_{k_2}-j_{ik}+1}} \sum_{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-l_{k_2}}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa} - 1)!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa})!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{j_{ik}=l_i+1}^{(l_s+j_{sa}^{ik}-l)} \sum_{j_{sa}^{ik}=j_{sa}^{ik}-D-s}^{(n_{sa}-j_{sa}^{ik})} \sum_{n+\mathbb{k}}^{(n_i-j_s+1)} \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})} \sum_{\mathbb{k}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1}^{(\cdot)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \frac{(2 \cdot n_{is} + j_{sa}^s + l_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot j_{ik} + j_{sa}^s + l_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{sa}^{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 \geq l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z S_{j_{ik} j_{sa}}^{DOST} = \sum_{k=l}^{(l_{sa} + j_{sa}^{ik} - l - j_{sa} + 1)} \sum_{(j_{ik} = l_{ik} + n - D)} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik})}^{(n_i - j_{ik} - k_1 + 1)} \sum_{(n_{sa} = n - j_{sa} - k_2)}^{(n_{ik} + j_{sa} - j_{sa}^{ik})}$$

$$\frac{(n_{sa} - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_{sa} - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - j_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - k_2)!}$$

$$\frac{(n_{sa} - j_{sa} - 1)!}{(n_{sa} - j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(n - l - j_{sa}^{ik})!}{(n_{sa} - j_{sa} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

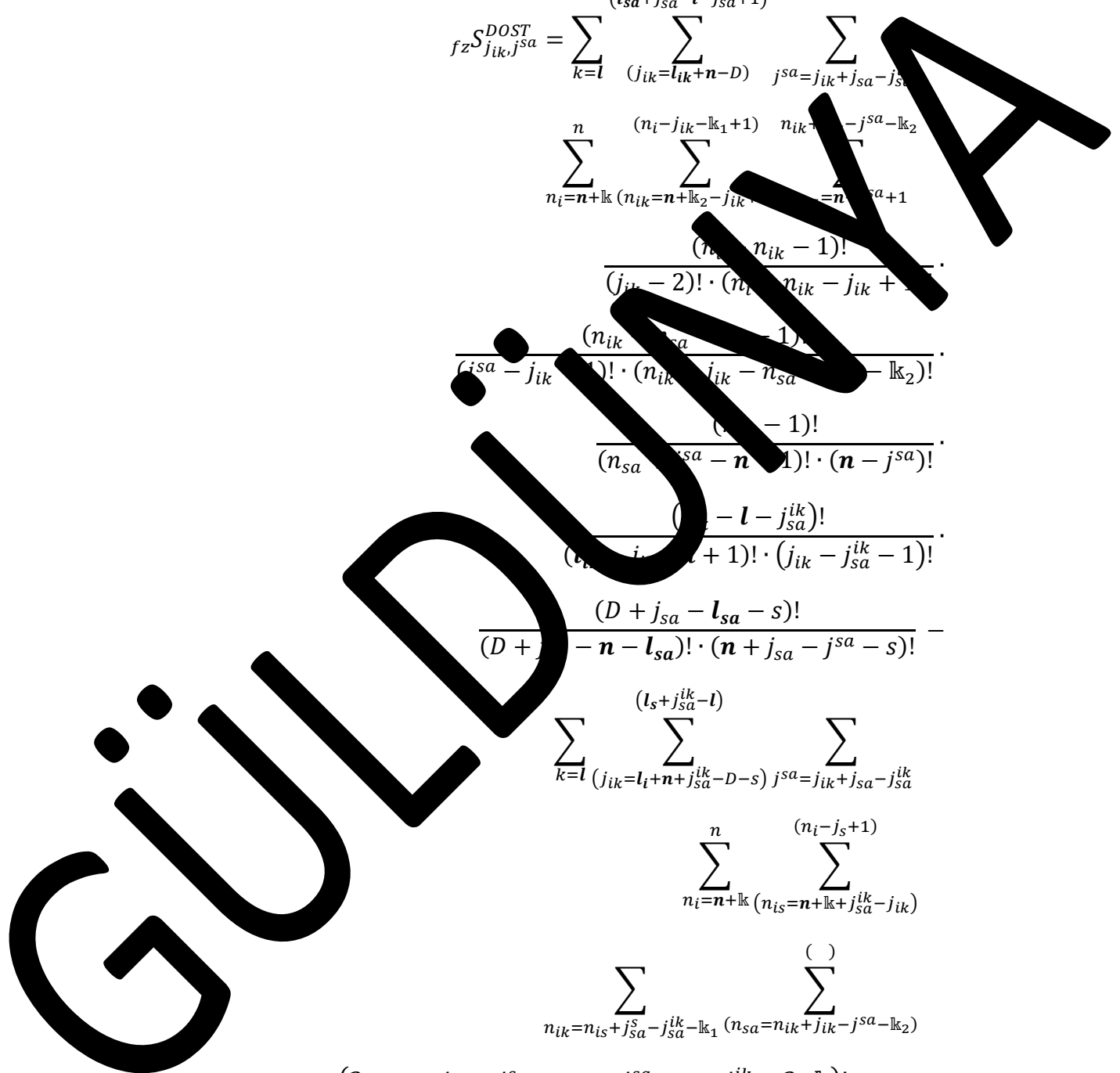
$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - k_1}^{( )} \sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - k_2)}^{( )}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - s - j_{sa}^{ik} - 2 \cdot k)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot k)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$





$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z^{DOS} \sum_{j_{ik}, j_{sa}^{ik}} \sum_{j_{ik}=l_s+n+j_{sa}^{ik}-1}^{(j_{sa}^{ik}-j_{sa})} \sum_{j_{sa}^{ik}=l_i+n+j_{sa}-D-s}^{l_s+j_{sa}-l} \sum_{n_{ik}=n+k_2-j_{ik}+1}^{(n_i-n-k_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-k_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

GÜLDÜZİNYA

$$\begin{aligned}
 & \sum_{k=l} \sum_{(j_{ik}=l_s+n+j_{sa}^{ik}-D-1)}^{(l_s+j_{sa}^{ik}-l)} \sum_{j_{sa}=l_s+j_{sa}-l+1}^{l_i+j_{sa}-l-s+1} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} + j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_i - 1)!}{(n_i + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \\
 & \frac{(l_{ik} - j_{ik} - 1)!}{(l_{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - 1)!}{(j_{ik} + j_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \cdot \\
 & \sum_{k=l} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})}^{(\quad)} \sum_{j_{sa}=l_{sa}+n-D}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(\quad)} \\
 & \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n - s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}
 \end{aligned}$$

GÜLDEN

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$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z^{DOST} j_{sa}^{ik} = \sum_{k=l}^{(l_i+n+1-j^{sa})} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(l_i+j_{sa}-l-s+1)} j^{sa}=l_i+n+j_{sa}-D-s$$

$$\sum_{n_{ik}+k}^n \sum_{(n_{ik}=n_{sa}-j_{ik}+1)}^{(n_{ik}-k-k_1+1)} n_{ik}+j_{ik}-j^{sa}-k_2$$

$$\sum_{n_{sa}=n-j^{sa}+1}^{(n_{sa}-1)!} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(n_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!}$$

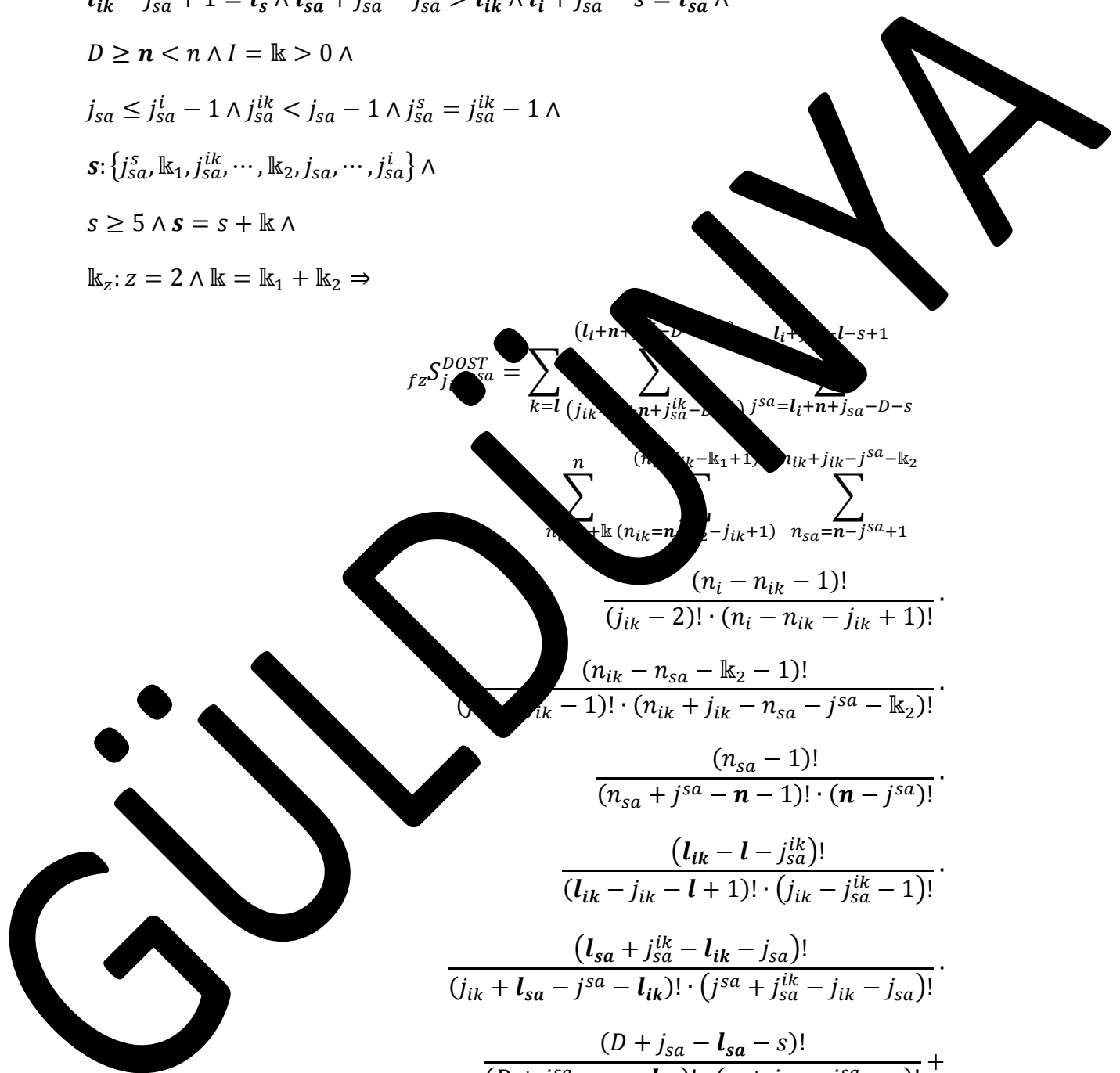
$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l}^{(l_s+j_{sa}^{ik}-l)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{l_i+j_{sa}-l-s+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$



$$\begin{aligned}
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{\substack{(n_i-j_{ik}-\mathbb{k}_1+1) \\ (n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}} \sum_{\substack{n_{sa}=n-j^{sa}+1 \\ (n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l - l - j_{sa})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} - l_{sa} - j_{sa})!}{(j_{ik} + j_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa}^{ik} - j_{sa})!} \cdot \\
 & \frac{(n + j_{sa} - n - s)!}{(n + j_{sa} - n - s)! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{i=l}^{(l_{ik}-l)} \sum_{j_{sa}^{ik}=j_{sa}^{ik}-D-j_{sa}}^{j_{sa}^{ik}-j_{sa}^{ik}} j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{()} \\
 & \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n - s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$j_{ik, j_{sa}}^{ST} = \sum_{k=l} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(l_{sa}-l+1)} j^{sa=l_{sa}+n-D}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{(n_{sa}=n-j^{sa}+1)}^{n_{ik}+j_{ik}-j^{sa}-k_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l} \sum_{\binom{()}{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}} \sum_{l_s+j_{sa}-l}^{l_s+j_{sa}-l} j^{sa=l_i+n+j_{sa}-D-s}$$

$$\sum_{n_i=n+l_k}^n \sum_{\binom{()}{n_i=n+l_k}} \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} (n_i=n+l_k+j_{sa}^{ik}-j_{ik})$$

$$\sum_{n_{ik}=n_i+j_{sa}^s-j_{sa}^{ik}-l_{sa}} \sum_{\binom{()}{n_{ik}=n_i+j_{sa}^s-j_{sa}^{ik}-l_{sa}}} \sum_{(n_{ik}-l_k)}^{(n_{ik}-l_k)} (n_{ik}=n_i+j_{sa}^s-j_{sa}^{ik}-l_{sa})$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - l_k)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - l_k) \cdot 2 \cdot l_k \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa} - j_{ik} - 1) \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_k)!}{(n + j^{sa} + j_{sa} - n - l_i - j_{sa} - s)! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \wedge$$

$$D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{sa} + j_{sa}^{ik} - l - j_{sa} + 1)} \sum_{(j_{ik} = l_{sa} + n + j_{sa}^{ik} - D - j_{sa})} j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{sa} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1)} \sum_{n_{sa} = n - j_{sa}^{ik} - \mathbb{k}_2}^{(n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - \mathbb{k}_1} \sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)}^{(\quad)}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$((D \geq n < n \wedge l_s > D - n + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$

$(D \geq n < n \wedge l_s > D - n + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \wedge$

$D \geq n < n \wedge l = k > 0 \wedge$

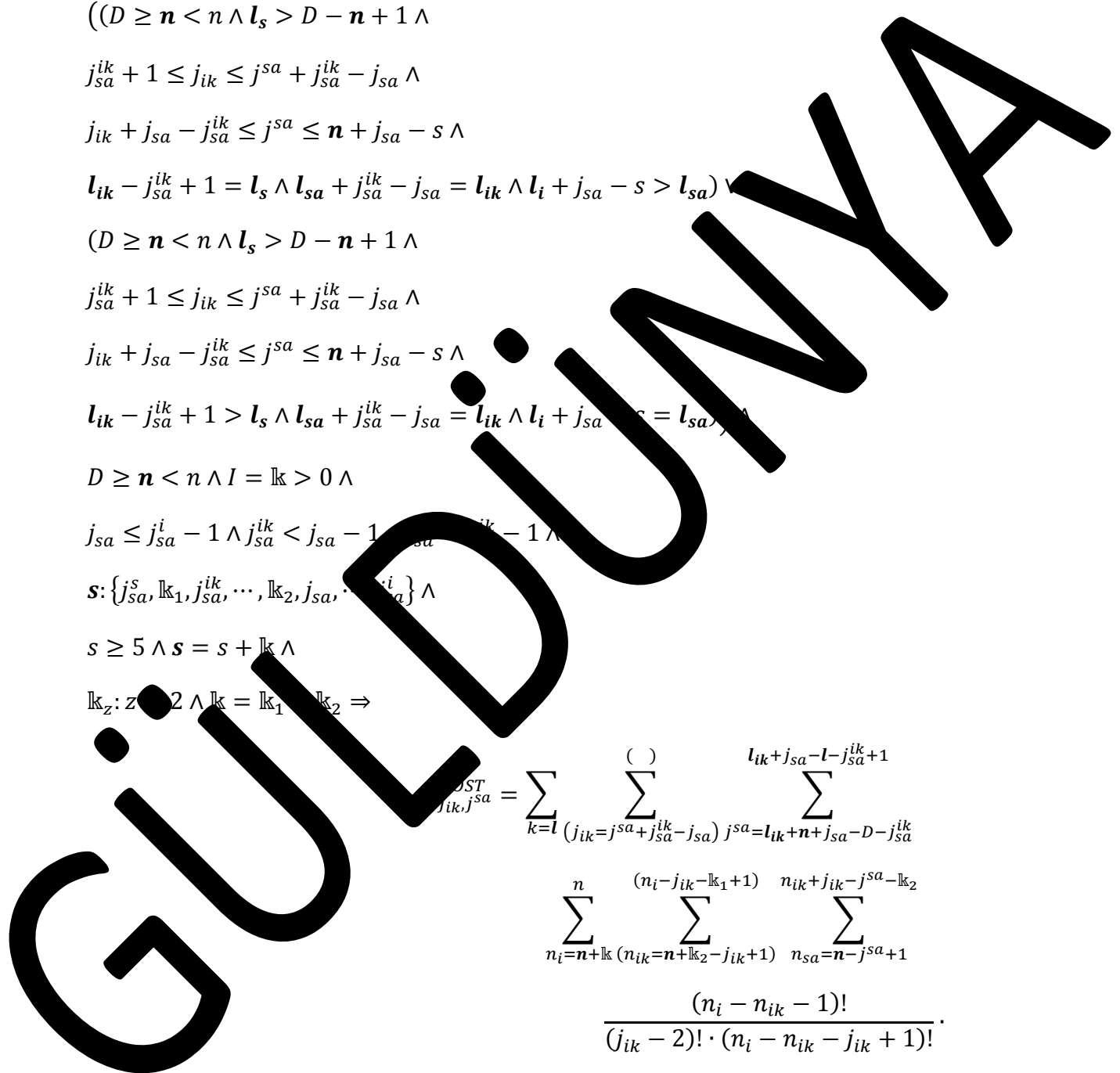
$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 5 \wedge s = s + k \wedge$

$k_z: z \geq 2 \wedge k = k_1 \vee k_2 \Rightarrow$

$$\sum_{k=l}^{ST} \sum_{j_{ik}, j_{sa}}^{( )} \sum_{j_{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-k_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$





$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(\quad)} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{l_s+j_{sa}-l} j^{sa}=l_i+n+j_{sa}-D-s$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is} \triangleq n - j_{ik})}^{(n_i - \mathbb{k} + 1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-\mathbb{k}_2}^{(\quad)} \sum_{(j_{sa} - \mathbb{k}_2)}$$

$$\frac{(2 \cdot n_{is} + j_{ik} - j_{sa}^s - n_{sa} + j^{sa} - j_{sa}^{ik} - 2 \cdot \mathbb{k}_j)}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - 2 \cdot j_{sa}^s - 2 \cdot \mathbb{k}_j)! \cdot (n - s)!}$$

$$\frac{(j_{sa} - l - 1)!}{(j_{sa} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + \dots - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\begin{aligned} & ((D \geq n < n \wedge l_s = D - n + 1 \wedge \\ & j_{ik}^{ik} + 1 \leq j_{ik} < j^{sa} + j_{sa} - j_{sa} \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - s \wedge \\ & l_{ik} - j_{sa} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee \\ & (D \geq n < n \wedge l_s > D - n + 1 \wedge \\ & j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge \\ & l_{ik} - j_{sa} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \wedge \end{aligned}$$

$$\begin{aligned} & D \geq n < n \wedge I = \mathbb{k} > 0 \wedge \\ & j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge \\ & s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge \end{aligned}$$

$s \geq 5 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_{ik}+n-D)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}}$$

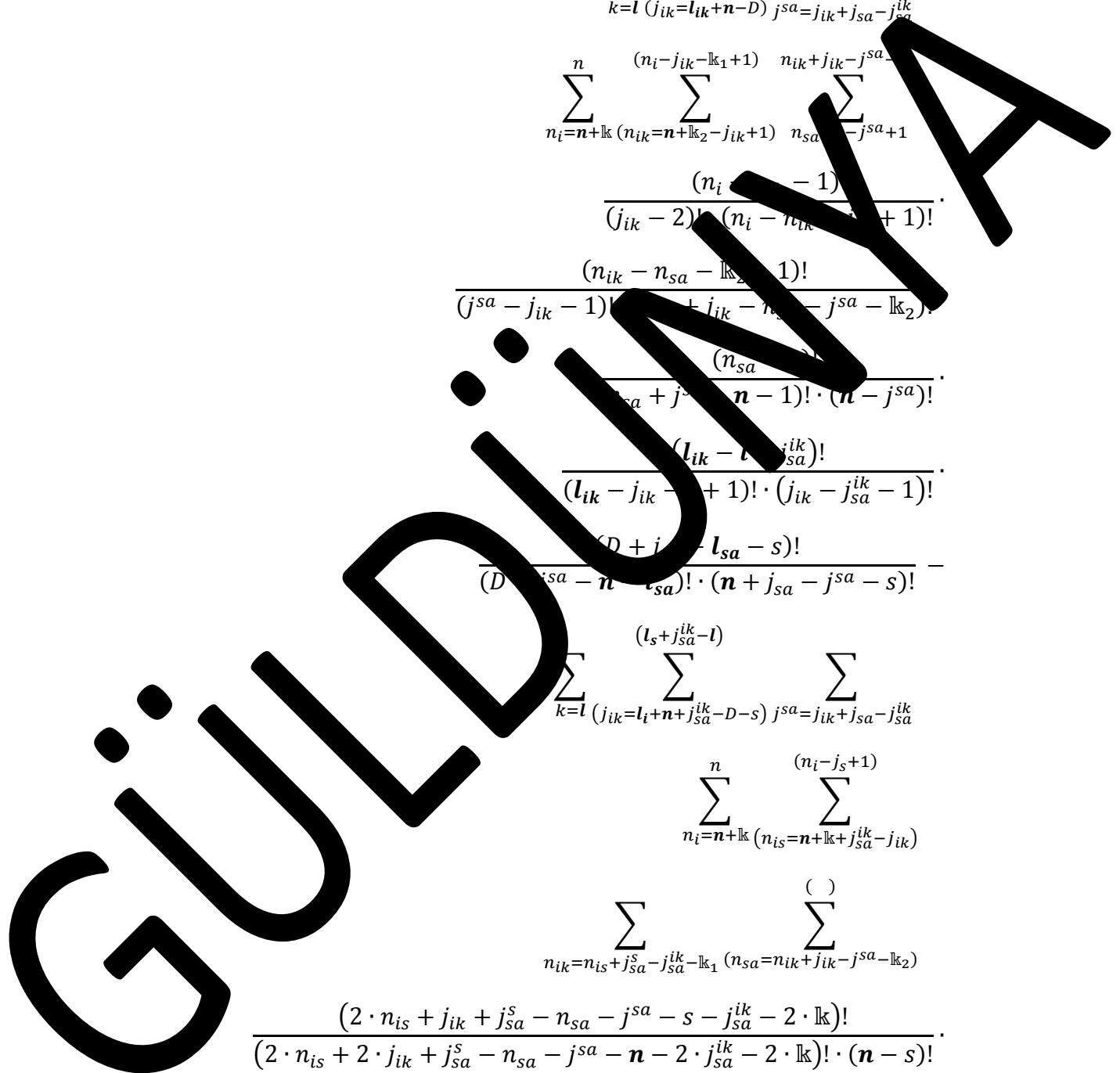
$$\frac{(n_i - 1)!}{(j_{ik} - 2)! (n_i - n_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! (j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(j_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l_{sa}^{ik})!}{(l_{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik}=l_i + n + j_{sa}^{ik} - D - s)} \sum_{j_{sa}=j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j_{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$



$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz^{DOS} j_{ik,j_{sa}} = \sum_{k=l}^{j_{sa}^{ik}-j_{sa}} \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_{ik}+n-D)}^{l_i+j_{sa}-l-s+1} \sum_{j^{sa}=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_k-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_s=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j^{sa} - l_{k_2})!} \cdot$$

$$\frac{(n_{sa} + j_{sa} - n - 1)!}{(j^{sa} - 1)!} \cdot$$

$$\frac{(l_{ik} - j_{sa} - j^{sa})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + j_{sa} - j^{sa} - j_{sa}^{ik} - 1)! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=l}^{( )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{l_s+j_{sa}-l} \sum_{j^{sa}=l_{sa}+n-D}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}}^{( )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{( )}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot l_k)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot l_k)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz^S j_{ik} \sum_{k=l}^{(l_i+n+j_{sa}^{ik}-D-s-1)} \sum_{(j_{ik}=l_{ik}+n-D)}^{l_i+j_{sa}-l-s+1} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{sa}-1}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{l_i+j_{sa}-l-s+1} j_{sa}^{sa=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_k-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{(n_{sa}=n_{ik}+j_{sa}-j_{sa}^{ik}-l_{k_2})}^{n_{ik}+j_{sa}-j_{sa}^{ik}-l_{k_2}}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} - n_{sa} - j_{sa} - l_{k_2})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

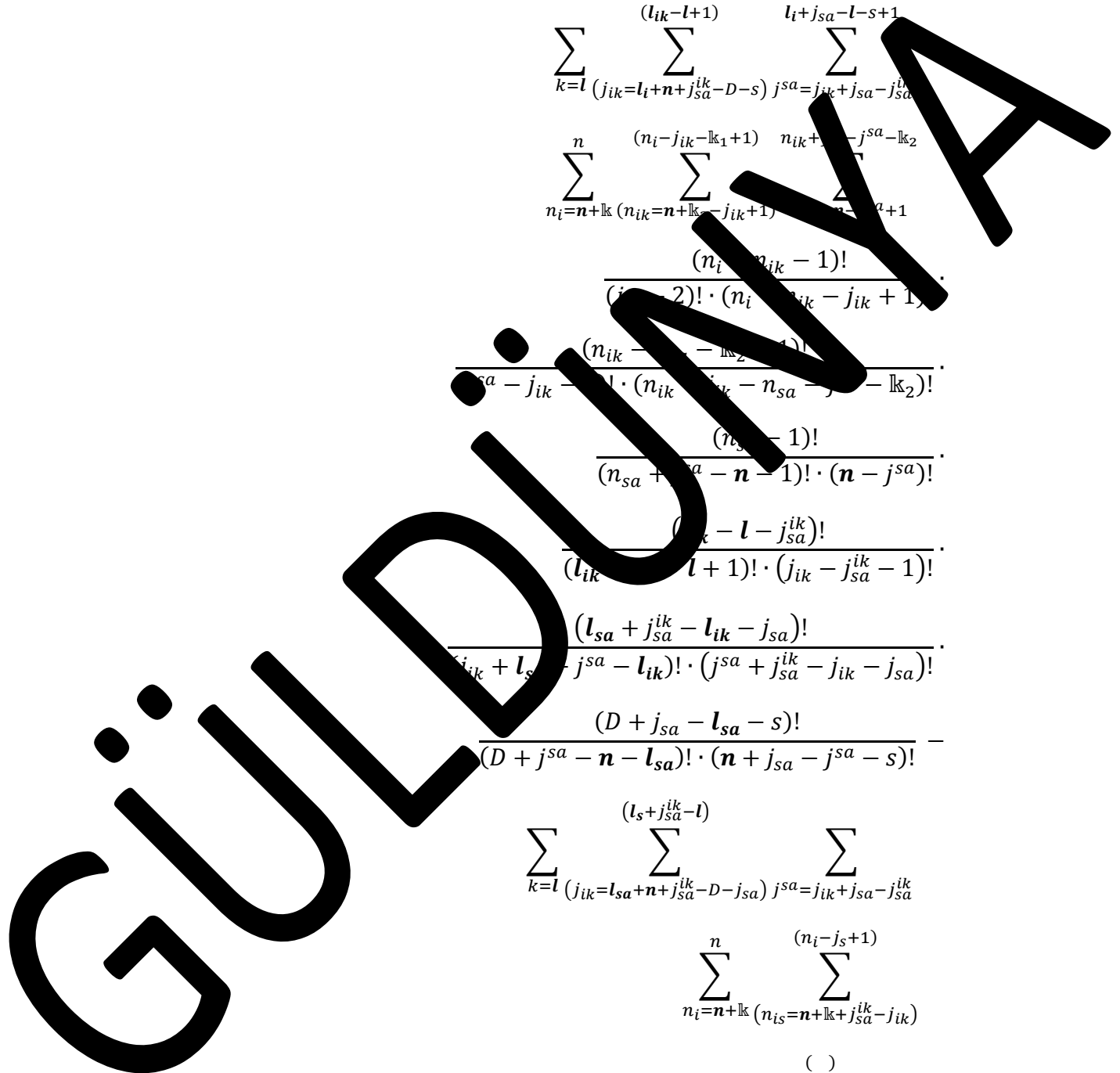
$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=l}^{(l_s+j_{sa}^{ik}-l)} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})}^{(l_s+j_{sa}^{ik}-l)} \sum_{j_{sa}^{sa=j_{ik}+j_{sa}-j_{sa}^{ik}}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{( )}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot l_k)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot l_k)! \cdot (n - s)!}$$



$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa})) \wedge$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$\{j_{sa}^s, \mathbb{k}_1, j_{sa}^i, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
 f_{z^{S_{j_{ik}, j^{sa}}}}^{DOST} &= \sum_{k=l}^{(j^{sa} + j_{sa}^{ik} - j_{sa})} \sum_{(j_{ik} = l_{ik} + n - D)} \sum_{j^{sa} = l_{sa} + n - D}^{l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1} \\
 &\sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - k_2} \\
 &\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 &\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
 &\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 &\frac{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}{(j_{ik} + j_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 &\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 &\sum_{k=l}^{(l_{ik} - l + 1)} \sum_{(j_{ik} = l_{ik} + n - D)}^{l_{sa} - l + 1} \sum_{j^{sa} = l_{ik} + j_{sa} - l - j_{sa}^{ik} + 2} \\
 &\sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - k_2} \\
 &\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 &\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
 &\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 &\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
 \end{aligned}$$

GÜLDEN



$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{()} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})}^{l_s+j_{sa}-l} j_{sa}^{l_i+n+j_{sa}-D-s}$$

$$\sum_{n_i=n+l_k}^n \binom{n_i+l_k-1}{n_i+l_k-j_{ik}}$$

$$\sum_{n_{ik}=n_i+j_{sa}^{ik}-l_{k_2}}^{()} j_{sa}^{n_{ik}-l_{k_2}}$$

$$\frac{(2 \cdot n_{is} + j_{ik} - j_{sa}^s - n_{sa} - j_{sa} - j_{sa}^{ik} - 2 \cdot l_k)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - 2 \cdot j_{sa}^{ik} - 2 \cdot l_k)! \cdot (n - s)!}$$

$$\frac{(j_{sa} - l - 1)!}{(j_{sa} - j_{sa}^{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j_{sa} + \dots - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz_{POST}^{sa} = \sum_{k=l}^{n+j_{sa}^{ik}-j_{sa}-1} \sum_{j_{ik}=k+n-D}^{l_{sa}-l+1} \sum_{j^{sa}=l_{sa}+n-D}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\begin{aligned}
& \sum_{k=l} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})}^{(l_{ik}-l+1)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{l_{sa}-l+1} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{(n_{sa}=n-j_{sa}^{ik})}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} + j_{ik} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j^{sa} - l_{k_2})!} \cdot \\
& \frac{(n_i + j^{sa} - n - 1)! \cdot (n - j^{sa} - 1)!}{(n_i - j_{ik} - l_{k_1} + 1)! \cdot (j_{ik} - j_{sa} - 1)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + j_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - l_{sa} - s)! \cdot (n + j_{sa} - j^{sa} - s)!} \\
& \sum_{k=l} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(l_s+j_{sa}^{ik}-l)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{()} \\
& \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot l_k)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot l_k)! \cdot (n - s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
\end{aligned}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

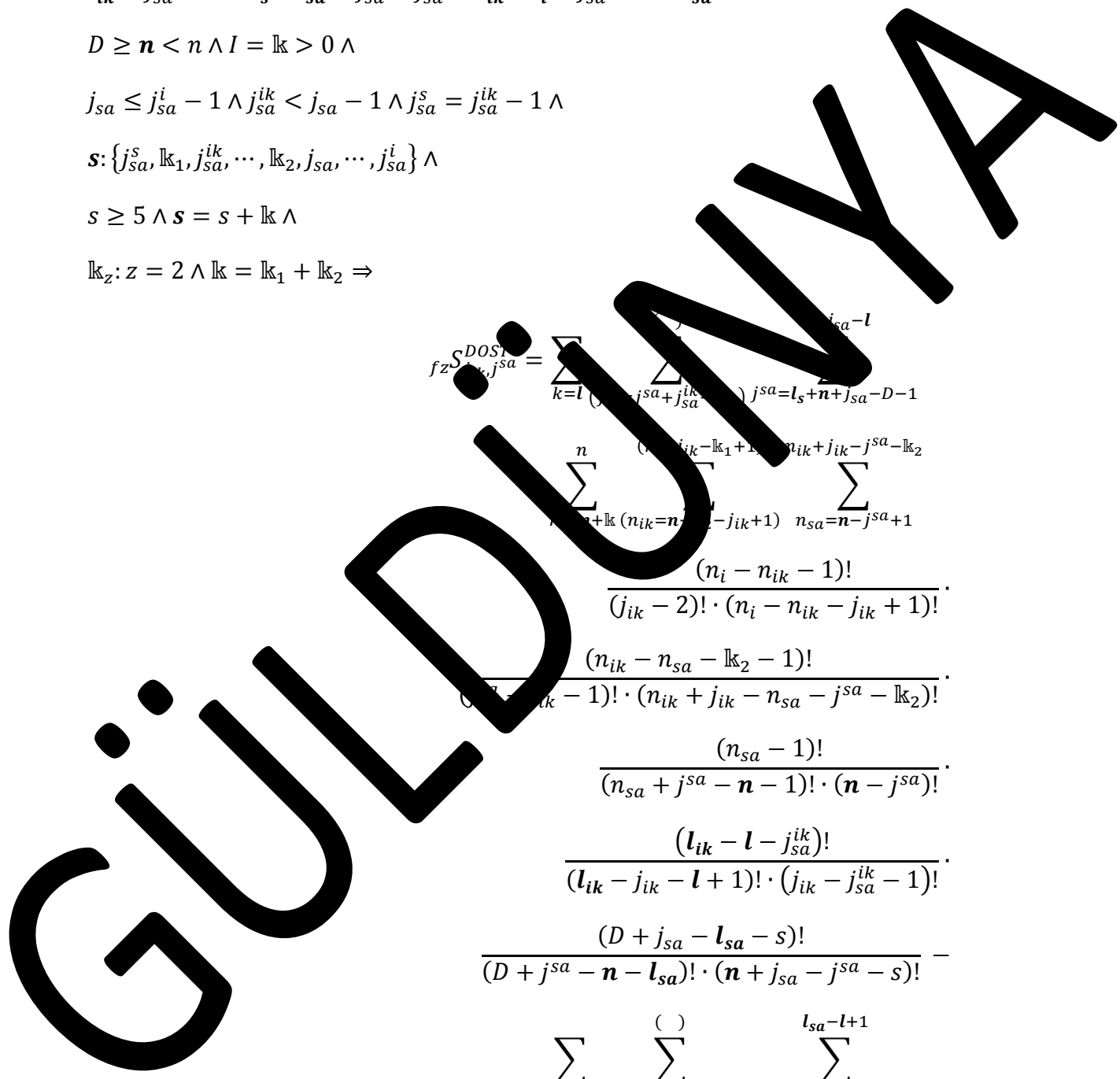
$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$fzS_{k,j_{sa}}^{DOS} = \sum_{k=l}^n \sum_{j_{sa}^{ik} = j_{sa} + j_{sa}^{ik} - j_{sa}}^{j_{sa} - l} j^{sa} = l_s + n + j_{sa} - D - 1$$

$$\sum_{n_i = n + k}^n \sum_{n_{sa} = n - j_{sa} + 1}^{n_{ik} - k_1 + 1} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{ik} + j_{ik} - j_{sa} - k_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(n_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^n \sum_{j_{ik} = j_{sa} + j_{sa}^{ik} - j_{sa}}^{( )} \sum_{j^{sa} = l_i + n + j_{sa} - D - s}^{l_{sa} - l + 1}$$

$$\sum_{n_i = n + k}^n \sum_{n_{is} = n + k + j_{sa}^{ik} - j_{ik}}^{(n_i - j_s + 1)}$$



$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{\binom{()}{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j^{sa} = j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$j_{ik}, j_{sa}^{OST} = \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik}=l_s + n + j_{sa}^{ik} - D - 1)} \sum_{j^{sa}=j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{(l_{sa} + j_{sa}^{ik} - l - j_{sa} + 1)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)} \sum_{j_{sa} = j_{sa} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n: n+k}^n \sum_{(n_{is} = n_{is} + j_{sa}^{ik} - l - j_{sa} + 1)} \sum_{(j_{ik})}$$

$$\sum_{(n_{ik} = n_{is} + j_{sa}^{ik} - l - j_{sa} - k_1 - k_2)} \sum_{(j_{sa} = j_{sa} - k_2)}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - s - j_{sa}^{ik} - 2 \cdot k)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - s - j_{sa}^{ik} - 2 \cdot k)! \cdot (n - s)!}$$

$$\frac{(D - l - 1)!}{(D + j_{sa} - l - j_{sa} - s)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j_{sa} + l_i - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{ik} + 1 \leq j_{ik} < j_{sa} + j_{sa} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - j_{sa} \wedge$$

$$l_{ik} - j_{sa} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge k >$$

$$j_{sa} - j_{sa} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}, k_1, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq s \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$fz S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{()} \sum_{(j_{ik} = j_{sa} + j_{sa}^{ik} - j_{sa})} \sum_{j_{sa} = l_i + n + j_{sa} - D - s}^{l_i + j_{sa} - l - s + 1}$$

$$\sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_{ik}-l_{k_1}+1) \\ (n_{ik}=n+l_{k_2}-j_{ik}+1)}} \sum_{\substack{n_{ik}+j_{ik}-j^{sa}-l_{k_2} \\ n_{sa}=n-j^{sa}+1}} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - l - j_{sa})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_s - l - j_{sa} - s)!}{(l_s + j^{sa} - n - 1)! \cdot (n - j^{sa} - s)!} \cdot \sum_{k=l}^{\binom{()}{l_s+j_{sa}-l}} \sum_{\substack{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa} \\ j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}} \sum_{\substack{n_i=n+l_k \\ (n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}}^n \sum_{\substack{(n_i-j_s+1) \\ (n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}} \frac{(2 \cdot j_{ik} + 2 \cdot j_{sa}^s + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot l_k)!}{(2 \cdot j_{ik} + 2 \cdot j_{sa}^s + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot l_k)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$l_s \wedge l_i > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$D \geq n < n \wedge l = k > 0 \wedge$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 5 \wedge s = s + k \wedge$

$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$

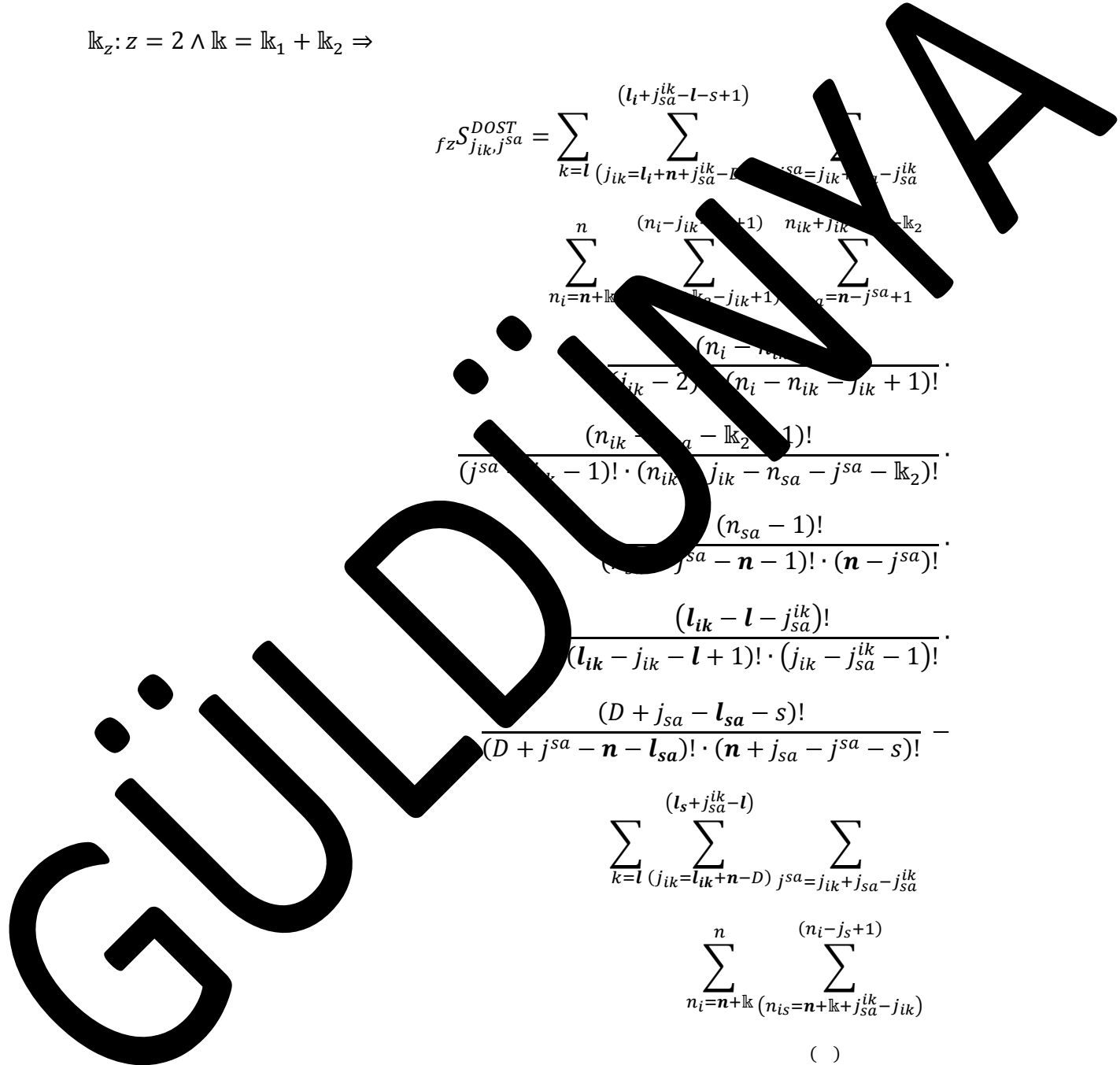
$$fz_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_i + j_{sa}^{ik} - l - s + 1)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - k)} \sum_{(j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})} \sum_{n_i = n + k}^n \sum_{(n_i - j_{ik} - l + 1)}^{(n_i - j_{ik} + 1)} \sum_{(n_{ik} = n_{ik} - k_2)}^{(n_{ik} + j_{ik} - k_2)} \sum_{(n_{sa} = n - j_{sa} + 1)}^{(n_{sa} - j_{ik} + 1)}$$

$$\frac{(n_i - j_{ik} - l + 1)! \cdot (n_{ik} + j_{ik} - k_2)!}{(j_{sa}^{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j_{sa} - k_2)!} \cdot \frac{(n_{sa} - 1)!}{(j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_{ik} + n - D)} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}} \sum_{n_i = n + k}^n \sum_{(n_{is} = n + k + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - k_1} \sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - k_2)}^{( )}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - s - j_{sa}^{ik} - 2 \cdot k)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot k)! \cdot (n - s)!}$$





$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z \geq 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_Z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(j^{sa} + j_{sa}^{ik} - j_{sa})} \sum_{(j_{ik} = l_s + n + j_{sa}^{ik} - D - 1)}^{l_s + j_{sa} - l} \sum_{j^{sa} = l_{sa} + n - D}^{n} \sum_{(n_i - j_{ik} - k_1 + 1)}^{n_{ik} + j_{ik} - j^{sa} - k_2} \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{n_{sa} = n - j^{sa} + 1} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\begin{aligned}
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{j_{ik}=l_s + n + j_{sa}^{ik} - D}^{n - j_{ik} - l + 1} \sum_{j_{sa}=l_s + j_{sa}^{ik} - l + 1}^{n - j_{sa} - l + 1} \\
 & \sum_{n_i=n+k}^n \sum_{n_{ik}=n_i - j_{ik} - 1}^{(n_i - j_{ik} - 1)} \sum_{n_{sa}=n - j_{sa} + 1}^{n_{ik} + j_{ik} - j_{sa} - k_2} \\
 & \frac{(n_i - n_{ik})!}{(n_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{( )} \sum_{(j_{ik}=j^{sa} + j_{sa}^{ik} - j_{sa})}^{l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1} \sum_{j^{sa}=l_i + n + j_{sa} - D - s} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)} \\
 & \sum_{n_{ik}=n_{is} + j_{sa}^{ik} - j_{sa} - k_1}^{( )} \sum_{(n_{sa}=n_{ik} + j_{ik} - j^{sa} - k_2)}
 \end{aligned}$$

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$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - \mathbf{n} - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (\mathbf{n} - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - \mathbf{n} - l_i - j_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!}$$

$$((D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa})) \wedge$$

$$D \geq \mathbf{n} < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^i = j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, j_{sa}^i, \dots, j_{sa}^i\} \wedge$$

$$s \cdot 5 \wedge s = j_{sa} \wedge \mathbb{k} \wedge$$

$$\mathbb{k}_2 = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_{j_{ik} j_{sa}^{ik}}^{DOST} = \sum_{k=1}^{(l_{sa} + \mathbf{n} + j_{sa}^{ik} - D - j_{sa} - 1)} \sum_{(j_{ik} = l_s + \mathbf{n} + j_{sa}^{ik} - D - 1)}^{l_{sa} - l + 1} \sum_{j_{sa} = l_{sa} + \mathbf{n} - D}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}$$

$$\sum_{n_i = \mathbf{n} + \mathbb{k}}^n \sum_{(n_{ik} = \mathbf{n} + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = \mathbf{n} - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{j_{ik}=l_{sa} + n + j_{sa}^{ik} - D - j_{sa}}^{(j_{ik} - l_{sa} - 1)} \sum_{j_{sa}=j_{ik} + j_{sa} - j_{sa}}^{(j_{sa} - j_{ik} - 1)}$$

$$\sum_{n_i=n+l_{sa}}^n \sum_{n_{ik}=n+l_{sa}+j_{sa}^{ik}-j_{ik}+1}^{(j_{ik}-n_{ik}-1)} \sum_{n_{sa}=n-j^{sa}+1}^{(j_{sa}-n_{sa}-1)}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - n_{ik} - 1)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(j_{sa} - n_{sa} - 1)!}{(j_{sa} - n_{sa} - 1)! \cdot (j_{sa} - n_{sa} - 1)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{(l_{ik}-l+1)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}}^{(l_{ik}-l+1)}$$

$$\sum_{n_i=n+l_{sa}}^n \sum_{n_{is}=n+l_{sa}+j_{sa}^{ik}-j_{ik}}^{(n_i-j_s+1)}$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{\binom{()}{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - \mathbf{n} - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (\mathbf{n} - s)!}$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s + j_{sa}^{ik} - j_{ik} - \mathbf{l})! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j^{sa} + s - \mathbf{n} - \mathbf{l}_i - j_{sa})! \cdot (n_{sa} + j_{sa} - j^{sa} - s)!}$$

$$D \geq \mathbf{n} < \mathbf{n} \wedge \mathbf{l} \neq \mathbf{l} \wedge \mathbf{l}_s \leq D - \mathbf{n} + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge$$

$$\mathbf{l}_{sa} \leq D + j_{sa} - \mathbf{n} \wedge \mathbf{l}_i \leq D + s - \mathbf{n} \wedge$$

$$D \geq \mathbf{n} < \mathbf{n} \wedge \mathbf{l} = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k}$$

$$\mathbb{k}_z = 2 \wedge \mathbb{k}_z = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz \mathcal{S}_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{sa}+1}^{\mathbf{l}_s+j_{sa}-\mathbf{l}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^{\mathbf{n}} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!}$$

$$\begin{aligned}
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{j_{ik} = j_{sa}^{ik} - l + 1}^{j_{sa}^{ik} - l + 1} \sum_{j_{sa} = l_s + j_{sa}^{ik} - l + 1}^{j_{sa}^{ik} - l + 1} \\
 & \sum_{n_i = n + k_1}^n \sum_{n_{ik} = j_{ik} + 1}^{(n_i - j_{ik} - 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{ik} + j_{ik} - j_{sa} - k_2} \\
 & \frac{(n_i - n_{ik})!}{(n_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{( )} \sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}}^{( )} \sum_{j_{sa} = j_{sa} + 1}^{l_s + j_{sa} - l} \\
 & \sum_{n_i = n + k_1}^n \sum_{n_{is} = n + k_1 + j_{sa}^{ik} - j_{ik}}^{(n_i - j_s + 1)} \\
 & \sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - k_1}^{( )} \sum_{n_{sa} = n_{ik} + j_{ik} - j^{sa} - k_2}^{( )}
 \end{aligned}$$

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$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - \mathbf{n} - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (\mathbf{n} - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - \mathbf{n} - l_i - j_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa})!}$$

$$D \geq \mathbf{n} < \mathbf{n} \wedge l \neq i \wedge l_{sa} \leq D + j_{sa} - \mathbf{n} \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq \mathbf{n} < \mathbf{n} \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2$$

$$S_{j_{ik}, j_{sa}}^{DOST} = \left( \sum_{k=l} \binom{()}{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{j^{sa}=j_{sa}+1}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \right)$$

$$\begin{aligned}
 & \left( \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \\
 & \left( \sum_{k=l} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{sa}+2}^{(j^{sa}+j_{sa}^{ik}-j_{sa}-1) l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \right. \\
 & \sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l_{sa}^{ik})!}{(l_{ik} - j_{ik} - l_{sa}^{ik} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{ik} - j_{sa}^{ik} + j_{ik} - l_{sa}^{ik})!}{(j_{ik} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \\
 & \sum_{k=l} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(l_{ik}-l+1)} \sum_{j^{sa}=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2}^{l_{sa}-l+1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-k_2} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}
 \end{aligned}$$

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$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{\binom{()}{l_{ik}+j_{sa}^{ik}-l-j_{sa}^{ik}+1}} \sum_{j_{sa}^{ik}=j_{sa}^{ik}+1}^{\binom{()}{j_{sa}^{ik}+1}}$$

$$\sum_{n+l_k}^{\binom{()}{n+l_k}} \sum_{(n_{is}+l_k+j_{sa}^{ik}-j_{ik})}^{\binom{()}{n+l_k}}$$

$$n_{ik}=n_{is}+j_{sa}^{ik}-l_{k_1} \wedge (n_{ik}+j_{ik}-j^{sa}-l_{k_2})$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^{ik} - n_{sa} - j^{sa} - j_{sa}^{ik} - 2 \cdot l_k)!}{(2 \cdot n_{is} + 2 \cdot j_{sa}^{ik} - n_{sa} - j^{sa} - n - j_{sa}^{ik} - 2 \cdot l_k)! \cdot (n - s)!}$$

$$(l_s - l - 1)!$$

$$(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!$$

$$(D - l_i)!$$

$$(D + j^{sa} - s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!$$

$$D \geq n < n \wedge l \neq 1 \wedge l_s \leq n - 1 \wedge$$

$$j_{sa}^{ik} \leq j_{sa}^{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j_{sa}^{ik} \leq n + j_{sa} - s \wedge$$

$$l_{ik} + j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j^{sa} - n \wedge$$

$$l_s \leq n \wedge I = l_k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, l_{k_1}, j_{sa}^{ik}, \dots, l_{k_2}, j_{sa}, \dots, j_{sa}^l\} \wedge$$

$$s \geq 5 \wedge s = s + l_k \wedge$$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_z^{\mathcal{S}DOST}_{j_{ik}, j^{sa}} = \left( \sum_{k=l} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(l_s+j_{sa}-l)}^{j^{sa}=j_{sa}+1} \right.$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) +$$

$$\left( \sum_{k=l} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(j^{sa}+j_{sa}^{ik}-j_{sa}-1)} \sum_{j^{sa}=j_{sa}+2}^{l_s+j_{sa}-l} \right.$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\left. \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \right)$$

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$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{sa} - l + 1} \sum_{j^{sa} = l_s + j_{sa} - l + 1}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa}}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - j_{ik} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (j^{sa})!} \cdot$$

$$\frac{(l_{ik} - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + j_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\left( \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) -$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{sa} - l + 1} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - \mathbb{k}_1}^{( )} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n - s)!} \cdot$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_{sa} \leq D + j_{sa} - n \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$j_{ik, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{ik}-1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(l_{ik}-1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{(l_{ik}-1)}$$

$$\sum_{n+l}^{(n_i-l-k_1+1)} \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-l-k_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-k_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

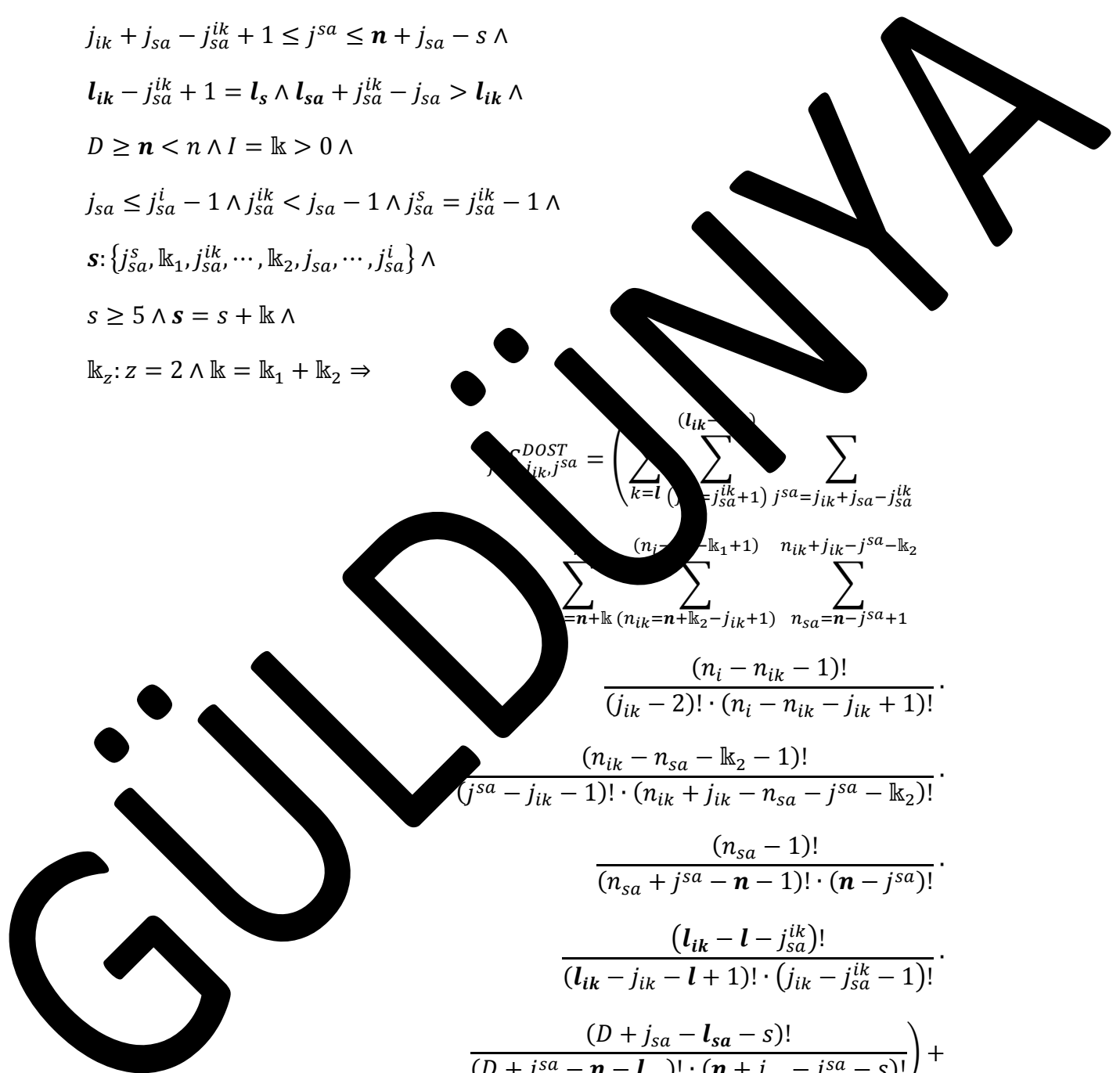
$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) +$$

$$\left( \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(l_{ik}-l+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{l_{sa}-l+1} \right)$$



$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_{ik}-l_{k_1}+1) \\ (n_{ik}=n+l_{k_2}-j_{ik}+1)}} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2} - 1)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_i - l - j_{sa})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} - l_{sa} - j_{sa})!}{(j_{ik} + j_{sa} - j_{sa} - l_{ik})! \cdot (j^{sa} - j_{sa}^{ik} - j_{sa})!} \cdot \\
 & \left( \frac{(D - j_{sa} - l_{sa} - s)!}{(n + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) \cdot \\
 & \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l-1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{(\quad)} \\
 & \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot l_k)!}{(2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot l_k)! \cdot (n - s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - n \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z^{DOST} = \left( \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}^{l_{sa} - l + 1} \frac{\sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 - 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{ik} + j_{ik} - j_{sa} - k_2} \frac{(n_i - n_{ik} - 1)!}{(n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \right) \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} + \left( \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{sa} - l + 1} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik} + 1}^{l_{sa} - l + 1} \sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{ik} + j_{ik} - j_{sa} - k_2} \right)$$

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$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa} - 1)!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa}^{ik})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (n_{sa} + j_{sa}^{ik} - j_{ik} - l_{sa})!} \cdot \frac{(D + j^{sa} - l_{sa} - n - j^{sa} - s)!}{(D + j^{sa} - n - j^{sa} - s)!} \cdot \sum_{k=0}^{(j_{sa}^{ik}-l)} \sum_{l_{ik}=j_{sa}^{ik}+1}^{n} \sum_{n_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{n} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{(2 \cdot n_{is} + j_{sa}^s + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

- $n_{sa} \wedge l \neq l \wedge l_s \leq D - n + 1 \wedge$
- $j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$
- $j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$
- $l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$

$$l_{sa} \leq D + j_{sa} - n \wedge l_i \leq D + s - n \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

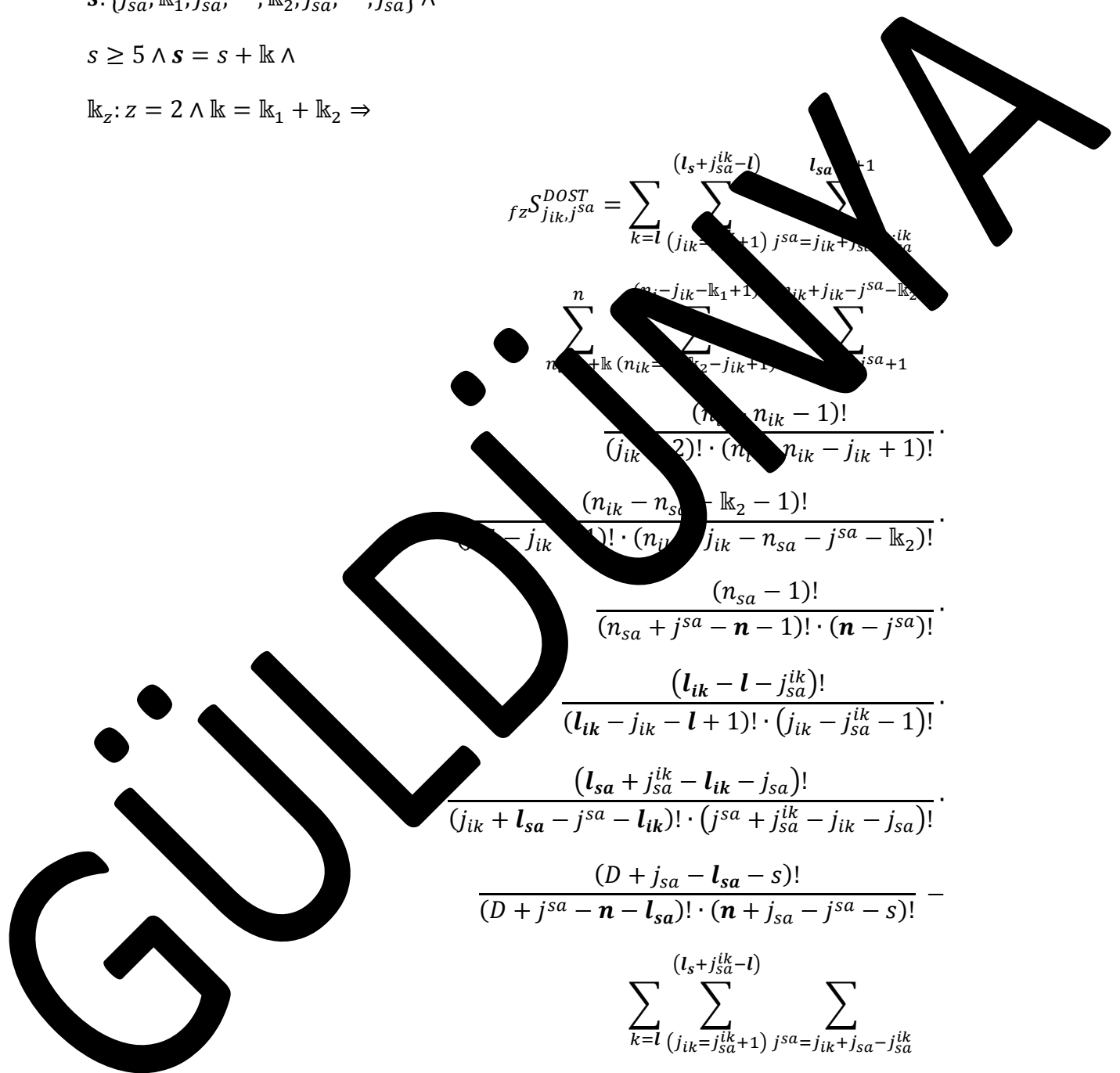
$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}} \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k} + j_{sa}^{ik} - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{(n_{sa} = n + \mathbb{k} + j_{sa} - j_{sa}^{ik} - \mathbb{k}_2)}^{(n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)} \sum_{j_{sa} + 1}^{j_{sa} + 1}$$

$$\frac{(n_{ik} - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}} \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)}$$





$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - l)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s - \mathbb{k}_1, j_{sa}^{ik}, \dots, j_{sa}^i, \dots, j_{sa}\} \wedge$$

$$s \geq 5 \wedge s = j_{sa} - \mathbb{k} \wedge$$

$$\mathbb{k}_2 = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik} j_{sa}}^{DOST} = \left( \sum_{k=l} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{j^{sa}=l_{sa}+n-D}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \right)$$

$$\begin{aligned}
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \left( \sum_{k=l}^{(j^{sa} + j_{sa}^{ik} - j_{sa} - 1) l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1} \sum_{(j_{ik} = j_{sa}^{ik} + 1) j^{sa} = l_{sa} + j_{sa} - l - j_{sa}^{ik} + 1} \sum_{n = D} \right) \\
 & \sum_{n_i = n + k}^n \sum_{(n_i - j_{ik} - 1) n_{ik} + j_{ik} - j_{sa} - l - k_2}^{(n_i - j_{ik} - 1) n_{ik} + j_{ik} - j_{sa} - l - k_2} \sum_{(n_{sa} = n - j^{sa} + 1)}^{(n_i - j_{ik} - 1) n_{ik} + j_{ik} - j_{sa} - l - k_2} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{k=l}^{(l_{ik} - l + 1)} \sum_{(j_{ik} = j_{sa}^{ik} + 1) j^{sa} = l_{sa} + j_{sa} - l - j_{sa}^{ik} + 2}^{l_{sa} - l + 1} \\
 & \sum_{n_i = n + k}^n \sum_{(n_i - j_{ik} - k_1 + 1) n_{ik} + j_{ik} - j^{sa} - k_2}^{(n_i - j_{ik} - k_1 + 1) n_{ik} + j_{ik} - j^{sa} - k_2} \sum_{(n_{sa} = n - j^{sa} + 1)}^{(n_i - j_{ik} - k_1 + 1) n_{ik} + j_{ik} - j^{sa} - k_2} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
 \end{aligned}$$

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$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (D + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=0}^{j_{sa} - l - j_{sa}^{ik} + 1} \binom{j_{sa} - l - j_{sa}^{ik} + 1}{k} (j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}) j^{sa} - D - s$$

$$\sum_{i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n-i-j_s+1)}$$

$$\sum_{i=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1}^{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(2 \cdot n_{is} + j_{sa}^s + j_{sa}^{ik} - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D + l_i - n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$D + l_{ik} + j_{sa}^{ik} - n - l_{sa} - j_{sa}^{ik} + 2 \leq l \leq i - 1 \wedge$$

$$j_{sa}^{ik} = j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$

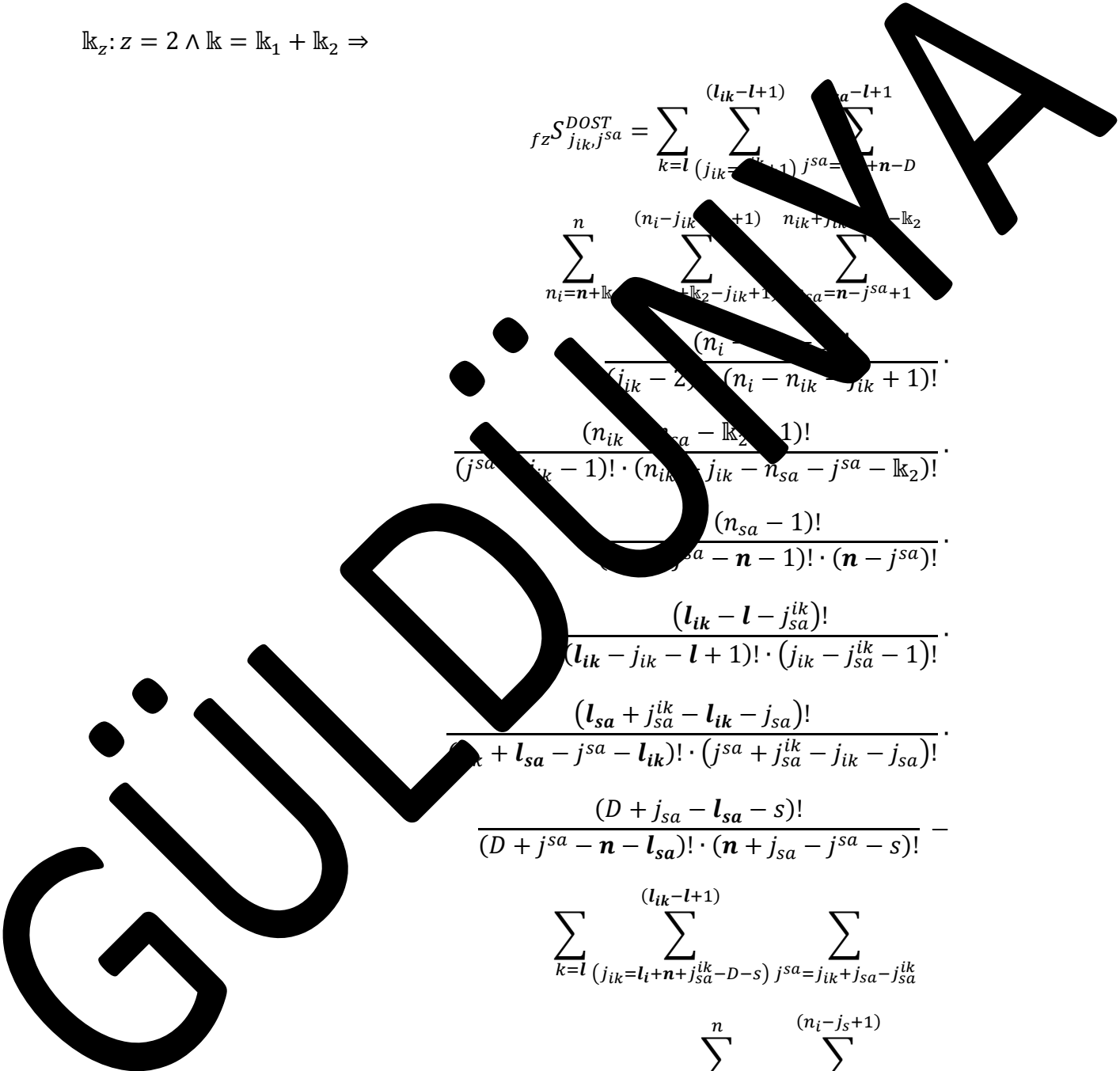
$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 5 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(l_{ik}-l+1)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{(l_{ik}-l+1)} \sum_{n_i=n+\mathbb{k}_1}^n \sum_{(n_i=j_{ik}+j_{sa}-\mathbb{k}_2)}^{(n_i-j_{ik}+1)} \sum_{(n_{is}=n+\mathbb{k}_1+j_{sa}^{ik}-j_{ik})}^{(n_{is}=n+\mathbb{k}_1+j_{sa}^{ik}-j_{ik})} \frac{(n_i - j_{ik} - 2)! (n_i - n_{ik} - j_{ik} + 1)! (n_{ik} - j_{sa} - \mathbb{k}_2 + 1)!}{(j_{sa}^{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)! (n_{sa} - 1)!} \cdot \frac{(n_{sa} - 1)!}{(j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(l_{ik}-l+1)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \sum_{n_i=n+\mathbb{k}_1}^n \sum_{(n_{is}=n+\mathbb{k}_1+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{( )}$$



$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - \mathbf{n} - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (\mathbf{n} - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - \mathbf{n} - l_i - j_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!}$$

$$D \geq \mathbf{n} < \mathbf{n} \wedge l \neq i \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$2 \leq l \leq D + l_{ik} + j_{sa} - \mathbf{n} - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik}$$

$$D + j_{sa} - \mathbf{n} < l_{sa} \leq D + l_{ik} + j_{sa} - j_{sa}^{ik} \wedge$$

$$D \geq \mathbf{n} < \mathbf{n} \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$S_{j_{ik}, j_{sa}}^{DOST} = \left( \sum_{k=l} \sum_{\binom{()}{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}} \sum_{l_s+j_{sa}-l}^{j_{sa}=l_{sa}+\mathbf{n}-D} \right)$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^{\mathbf{n}} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!}$$

$$\begin{aligned}
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \\
 & \left( \sum_{k=l}^{(j^{sa} + j_{sa}^{ik} - j_{sa} - 1)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_s + j_{sa} - l} \sum_{j^{sa} = l_s + n - D}^{n_{ik} + j_{ik} - j^{sa} - l_{k_2}} \right. \\
 & \sum_{n_i = n + l_{k_1}}^n \sum_{(n_{ik} = n + l_{k_2} - j_{ik} + 1)}^{(n_i - j_{ik} - l_{k_1} + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - l_{k_2}} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \\
 & \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{sa} - l + 1} \sum_{j^{sa} = l_s + j_{sa} - l + 1}^{n_{ik} + j_{ik} - j^{sa} - l_{k_2}} \\
 & \sum_{n_i = n + l_{k_1}}^n \sum_{(n_{ik} = n + l_{k_2} - j_{ik} + 1)}^{(n_i - j_{ik} - l_{k_1} + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - l_{k_2}} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!}
 \end{aligned}$$

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$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \left( \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) \cdot \sum_{k=l}^{( )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(l_i+n+j_{sa}-D)} \sum_{(n_{is}+l_{ik}+j_{sa}^{ik}-j_{ik})} \sum_{(n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{ik}-1)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \frac{(n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot l_{k_2})!}{(2 \cdot n_{is} + 2 \cdot j_{sa}^s + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot l_{k_2})! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$n \geq n < n \wedge l \neq i l \wedge l \leq D - n + 1 \wedge$$

$$D + l_{sa} + j_{sa} - n_{sa} - j_{sa}^{ik} + 2 \leq l \leq i l - 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} - j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge l = l_{k_2} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z S_{j_{ik} j_{sa}}^{DOST} = \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{sa} - l + 1} \sum_{j_{sa} = l_{sa} + n}^{n} \sum_{n_i = n + k}^{(n_i - j_{ik} - k_1 + 1)} \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{n_{ik} + 1 - j_{sa} - k_2} \sum_{(n_{sa} = n + k_1 + j_{sa} + 1)}^{n_{sa} - j_{sa} - 1}$$

$$\frac{(n_{sa} - n_{ik} - 1)!}{(j_{sa} - 2)! \cdot (n_{sa} - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - j_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - k_2)!} \cdot \frac{(n_{sa} - n_{sa} - 1)!}{(n_{sa} - n_{sa} - 1)! \cdot (n - j_{sa})!} \cdot \frac{(n_{sa} - l - j_{sa}^{ik})!}{(n_{sa} - j_{sa} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)}^{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - k_1}^{( )} \sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - k_2)}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - s - j_{sa}^{ik} - 2 \cdot k)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot k)! \cdot (n - s)!}$$



$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq l \wedge l_s \leq D - n + 1 \wedge$$

$$2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2$$

$$fz S_{j_{ik} j_{sa}}^{ST} = \sum_{l=1}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-k_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\begin{aligned}
 & \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \\
 & \left( \sum_{k=l}^{l_{sa}+n+j_{sa}^{ik}-D-j_{sa}-1} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_{sa}-l+1} \sum_{j^{sa}=l_{sa}+n-D} \right. \\
 & \sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-k_2} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l_{sa}^{ik})!}{(l_{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(j_{ik} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (l_{ik} - j_{sa})!}{(j_{ik} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \\
 & \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})}^{l_{sa}-l+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-k_2} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}
 \end{aligned}$$

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$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D)}^{(l_{ik}-l+1)}$$

$$\sum_{(n+l_k)}^{(n-l_{sa})} \sum_{(n_{is}+l_k+j_{sa}^{ik}-j_{ik})}$$

$$\sum_{(n_{ik}=n_{is}+j_{sa}^{ik}-l_{k_1})}^{(n_{ik}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^{ik} - n_{sa} - j^{sa} - j_{sa}^{ik} - 2 \cdot l_k)!}{(2 \cdot n_{is} + 2 \cdot j_{sa}^{ik} - n_{sa} - j^{sa} - n - j_{sa}^{ik} - 2 \cdot l_k)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} - s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l = l \wedge l_s \leq D - n - 1 \wedge$$

$$2 \leq l \leq D + l_{ik} + j_{sa}^{ik} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge l = l > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, l_{k_1}, j_{sa}^{ik}, \dots, l_{k_2}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$s \geq 5 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_z S_{j_{ik}, j^{sa}}^{DOST} = \left( \sum_{k=l} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})}^{(l_s+j_{sa}^{ik}-l)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{ik}} \right.$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-1}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\left. \frac{(l_{sa} - l - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) +$$

$$\left( \sum_{k=l} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(l_{sa}+n+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-l+1} \right.$$

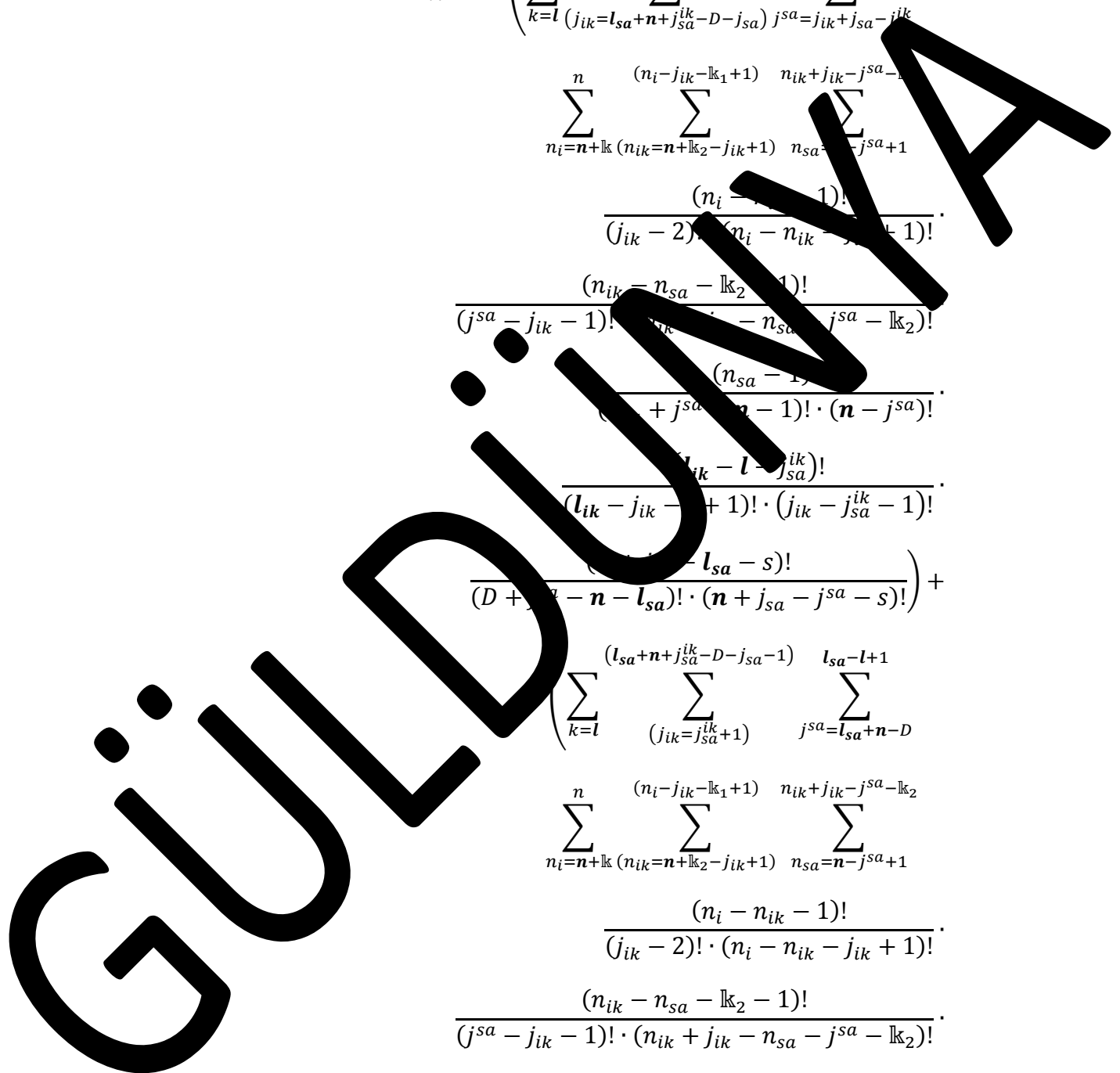
$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\left. \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \right)$$



$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_{sa} + n + j_{sa}^{ik} - D - j_{sa})}^{l_{sa} - l + 1} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik} + 1}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k + j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - k_2)}^{n_i - j_{sa} - k_2 + 1}$$

$$\frac{(n_i - j_{ik} - 1)!}{(n_i - j_{ik} - 2)! \cdot (n_i - j_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - j_{ik} - k_2 - 1)!}{(n_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{ik} - k_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{sa} - l - j_{sa}^{ik})!}{(l_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)}^{(l_s + j_{sa}^{ik} - l)} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - k_1}^{( )} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - k_2)}^{( )}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot k)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot k)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^l\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$\sum_{k=l}^{l+1} \sum_{j_{ik}=j_{sa}^{ik}+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \sum_{n_i=n+k}^n \sum_{n_{ik}=n+k_2-j_{ik}+1}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-k_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_s+j_{sa}^{ik}-l)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{sa}^{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-\mathbb{k}_2)}^{(\cdot)}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - \dots)}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n_{is} - s)!}$$

$$\frac{(l_s - l - \dots)}{(l_s + j_{sa}^{ik} - j_{ik} - \dots) \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - \dots)}{(D + j^{sa} + s - n - \dots - j_{sa}^{ik})! \cdot (n_{is} + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa}^{ik} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa}^{ik} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l \wedge l_{sa} + j_{sa}^{ik} - j_{sa}^{ik} = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge l_{sa} \leq D + s - n \wedge$$

$$D \geq n < n \wedge l_{sa} - \mathbb{k}_2 > 0 \wedge$$

$$j_{sa} \leq j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} < j_{sa}^{ik} - 1 \wedge j_{sa} = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^{ik}, \dots, j_{sa}^i\} \wedge$$

$$s \geq j_{sa}^{ik} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k}_z = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{sa}+j_{sa}^{ik}-l-j_{sa}+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa} - 1)!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa})!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=0}^{l_s + j_{sa}^{ik} - 1} \sum_{s=j_{sa}^{ik} + 1}^{n - j_{sa}^{ik}} \sum_{i=n+k}^{(n_i - j_s + 1)} \sum_{(n_{is} = n + k + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)} \sum_{k=n_{is} + j_{sa}^s - j_{sa}^{ik} - \mathbb{k}_1}^{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \frac{(2 \cdot n_{is} + j_{sa}^s + l_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot j_{ik} + j_{sa}^s + l_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D - n) < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$



$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=0}^{j_{sa} - j_{ik} + 1} \sum_{l=0}^{j_{sa} - j_{ik} + 1} \sum_{j_{sa} = l_i + n + j_{sa} - D - s}^{j_{sa} - j_{ik} + 1} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \sum_{k=l}^{(l_{ik} - l + 1)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_i + j_{sa} - l - s + 1} \sum_{j^{sa} = l_{ik} + j_{sa} - l - j_{sa}^{ik} + 2}$$

$$\begin{aligned}
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l - l - j_{sa})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} - l_{sa} - j_{sa})!}{(j_{ik} + j_{sa} - j_{sa} - l_{ik})! \cdot (j^{sa} + j_{sa} - j_{sa})!} \cdot \\
 & \frac{(n + j_{sa} - n - s)!}{(n + j_{sa} - n - s)! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{( )} \sum_{(j_{ik} + j_{sa} - j_{sa} - l_{ik})}^{l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1} \sum_{j^{sa}=l_i + n + j_{sa} - D - s} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1}^{( )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{( )} \\
 & \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n - s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

$$((D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik} j_{sa}}^{DOST} = \sum_{l=0}^{j_{sa}^{ik}-1} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(j_{sa}^{ik}-s-1)} \sum_{j_{sa}=l_i+n+j_{sa}-D-s}^{l_i+j_{sa}-l-s+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{l_i+j_{sa}-l-s+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_k-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j^{sa} - l_{k_2})!} \cdot$$

$$\frac{(n_{sa} + j_{sa} - n - 1)!}{(j^{sa} - 1)!} \cdot$$

$$\frac{(l_{ik} - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(l_{sa} + j_{sa}^{ik})! \cdot (l_{ik} - j_{sa})!}{(j_{ik} + j_{sa}^{ik} - j_{sa})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{l_i+j_{sa}-l-s+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}}^{( )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{( )}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot l_k)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot l_k)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$\sum_{j_{ik}, j_{sa}^{ik}} \sum_{i=1}^{(j^{sa} - j_{sa}^{ik} - j_{sa})} \sum_{j_{sa}^{ik}+1}^{l_s + j_{sa} - l} \sum_{j_{sa}^{ik}+1}^{j_{sa} = l_i + n + j_{sa} - D - s} \sum_{i=n+k}^n \sum_{(n_i = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - k_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

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$$\begin{aligned}
 & \sum_{k=l} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(l_s+j_{sa}^{ik}-l)} \sum_{j^{sa}=l_s+j_{sa}-l+1}^{l_i+j_{sa}-l-s+1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-k_2} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} + j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
 & \frac{(n_i - 1)!}{(n_i + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - 1)!}{(l_i - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - 1)!}{(j_{ik} + j_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l} \sum_{(j_{ik}=j_{sa}^{ik}+j_{sa}^{ik}-j_{sa})}^{( )} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_s+j_{sa}-l} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}-k_1}^{( )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{( )} \\
 & \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot k)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot k)! \cdot (n - s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

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$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z S_{j_{sa}^{ik}}^{DOST} = \sum_{k=l}^{n+j_{sa}^{ik}-D-s+1} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_i+j_{sa}^{ik}-s+1} \sum_{j=l_i+n+j_{sa}-D-s}^{n_{sa}=n-j_{sa}^{ik}+1} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} +$$

$$\begin{aligned}
 & \sum_{k=l} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(l_s+j_{sa}^{ik}-l)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{l_i+j_{sa}-l-s+1} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_i - 1)!}{(n_i + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - j_{ik} - 1)!}{(l_i - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - 1)!}{(j_{ik} + j_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(l_s+j_{sa}^{ik}-l)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)} \\
 & \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n - s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

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$$D \geq n < n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z^{DOST} = \sum_{k=l}^{\binom{l_{ik}+j_{sa}-j_{sa}^{ik}+1}{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}} \sum_{j_{sa}=j_{sa}+1}^{\binom{l_{ik}+j_{sa}-j_{sa}^{ik}+1}{j_{sa}^{ik}+1}} \sum_{n_i=n+k}^{\binom{n_i-j_{sa}-k_1+1}{n_{ik}=n+k_2-j_{ik}+1}} \sum_{n_{sa}=n-j_{sa}+1}^{\binom{n_{ik}+j_{ik}-j_{sa}-k_2}{n_{sa}=n-j_{sa}+1}} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \sum_{k=l}^{\binom{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}} \sum_{j_{sa}=j_{sa}+1}^{\binom{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}{j_{sa}^{ik}+1}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n-s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - l - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - \dots)! \cdot (n - \dots - j^{sa} - s)!}$$

$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} \leq l_i \wedge l_i + j_{sa} - s > l_s \wedge$

$D + s - n < l_i \leq D + l_{sa} + s - n - j_{sa} \wedge$

$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

$j_{sa} \leq i - 1 \wedge j_{sa}^{ik} \leq i_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$

$s \in \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, j_{sa}^i\} \wedge$

$s \geq \dots \wedge s = s + \mathbb{k}$

$z: z = z, \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\quad)} \sum_{j^{sa}=j_{sa}+1}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$



$s \geq 5 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=j_{sa}^{ik}+1}^{n_{ik}+j_{ik}-j^{sa}}$$

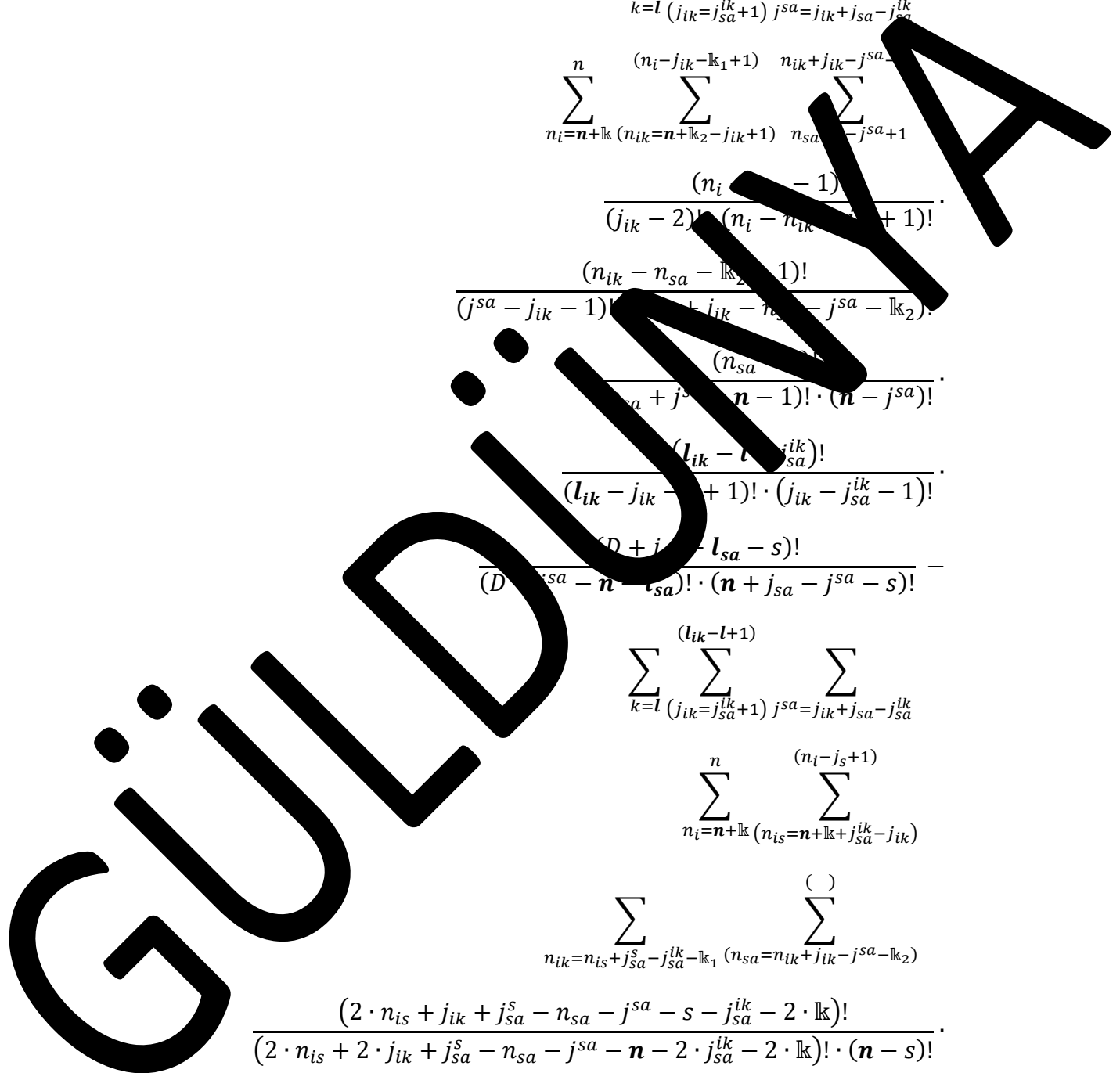
$$\frac{(n_i-1)!}{(j_{ik}-2)! \cdot (n_i-n_{ik}+1)!} \cdot \frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)! \cdot (j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-n-1)! \cdot (n-j^{sa})!} \cdot \frac{(l_{ik}-l_{sa}^{ik})!}{(l_{ik}-j_{ik}-l+1)! \cdot (j_{ik}-j_{sa}^{ik}-1)!} \cdot \frac{(D+j_{sa}-l_{sa}-s)!}{(D+j_{sa}-n-l_{sa})! \cdot (n+j_{sa}-j^{sa}-s)!}$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{( )}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$



$$D \geq n < n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z^{DOST} = \sum_{k=l}^{(l_{ik}-l+1)} \sum_{j_{ik}=j_{sa}^{ik}+1}^{(n-j_{sa}^{ik}-k_1+1)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{(n_{ik}+j_{ik}-j_{sa}-k_2)} \sum_{n_i=n+k}^{(n_{ik}=n+k_2-j_{ik}+1)} \sum_{n_{sa}=n-j_{sa}+1}^{(n_{sa}-1)}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \cdot \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(n_{ik}=n+k_2-j_{ik}+1)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n-s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - l - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - j_{sa}^{ik} - j_{ik} - l - 1)! \cdot (n - j_{sa}^{ik} - j_{ik} - l - 1)!}$$

$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - l_i - j_{sa}^{ik} - s > 0 \wedge$

$D + s - n < l_i \leq D + l_s - n - 1 \wedge$

$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

$j_{sa} \leq i - 1 \wedge j_{sa}^{ik} \leq i_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$

$s \in \{s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, j_{sa}^i\} \wedge$

$s \geq 1 \wedge s = s + \mathbb{k}$

$z: z = z, \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{sa}+j_{sa}^{ik}-l-j_{sa}+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-l_{sa})} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}$$

$$\sum_{(n_{is}=n+l_{sa}-j_{sa}^{ik}-j_{sa}^{ik})} \sum_{(n_{sa}=n+l_{sa}+j_{sa}^{ik}-j_{sa}^{ik})}$$

$$\sum_{(n_{is}=n+l_{sa}-j_{sa}^{ik}-j_{sa}^{ik})} \sum_{(n_{sa}=n+l_{sa}+j_{sa}^{ik}-j_{sa}^{ik})}$$

$$\frac{(n_{is} + j_{ik} + j_{sa}^{ik} - n_{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{sa}^{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$(D \geq l_i < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} - j_{sa}^{ik} \wedge j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$





$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa} - 1)!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa}^{ik})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - l_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa})!}{(D + j^{sa} - n - l_{sa})! \cdot (n_{sa} + j_{sa}^{ik} - j^{sa} - s)!} \cdot \sum_{k=l}^{l_{ik} + j_{sa}^{ik} - j_{sa}^{ik} + 1} \sum_{j_{sa}^{ik} = j_{sa}^{ik} + 1}^{j_{sa}^{ik} + 1} \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - \mathbb{k}_1} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\quad)}$$

$$\frac{(n_{is} + j_{sa}^s + j_{sa}^{ik} - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$(D > n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n)) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$j_{sa}^{DOST} = \sum_{k=l}^{(l_{ik}-l+1)} \sum_{j_{sa}^{ik}=j_{sa}+1}^{l_{sa}-l+1} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{n} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{(j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{sa}^{ik})} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}^{ik})} \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - \mathbb{k}_1)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n_{is} - s)!} \cdot \frac{(l_s - l - \mathbb{k})!}{(l_s + j_{sa}^{ik} - j_{ik})! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - n - 1)!}{(D + j^{sa} + s - n - j_{sa}^{ik})! \cdot (n_{is} + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1) \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa}^{ik} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa}^{ik} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n - 1 \leq D + l_s + j_{sa} - n - 1) \wedge$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa}^{ik} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa}^{ik} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + j_{sa} - n - 1 \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$D + s - n - 1 \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$\begin{aligned}
 f_z S_{j_{ik}, j^{sa}}^{DOST} &= \sum_{k=l} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{j^{sa}=l_{sa}+n-D}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \\
 &\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
 &\frac{(n_i - n_{ik} - j_{ik} + 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \\
 &\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \\
 &\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \\
 &\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \\
 &\frac{(l_{sa} + j_{sa}^{ik})! (l_{ik} - j_{sa})!}{(l_{sa} - j_{sa} - l_{ik})! (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \\
 &\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 &\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_{sa}-l+1} \sum_{j^{sa}=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2} \\
 &\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
 &\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \\
 &\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \\
 &\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \\
 &\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}
 \end{aligned}$$

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$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{(\quad)} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})}^{(\quad)} \sum_{(j_{sa}=l_i+n+j_{sa}-D-s)}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k)}^{(n_i+l_k+1)} \sum_{(n_{ik}=n+l_k-j_{sa}-l_{k_2})}^{(n_{ik}+1)}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - s - j_{sa}^{ik} - 2 \cdot l_k)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - s - 2 \cdot j_{sa}^{ik} - 2 \cdot l_k)! \cdot (n - s)!}$$

$$\frac{(D - l - 1)!}{(D + j_{sa} - n - l - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$((D \geq n < n \wedge l = l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_{sa} \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \wedge$$

$$D \geq n < n \wedge l = l > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z^S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(l_{sa}+n+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{j_{sa}^s=j_{sa}+n-D}^{l_{sa}-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j_{sa}}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} - j_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} +$$

$$\sum_{k=l} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})}^{(l_{ik}-l+1)} \sum_{j_{sa}^s=j_{ik}+j_{sa}-j_{sa}^{ik}}^{l_{sa}-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})} \sum_{(n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{sa}^{ik})} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k2})} \frac{(n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot l_k)!}{(2 \cdot n_{is} + 2 \cdot j_{sa}^s + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot l_k)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$(D \geq n < n \wedge l \neq l_i) \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$-j_{sa}^{ik} - 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l \neq l_i) \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$l_{sa} \leq D + j_{sa} - n \wedge l_i \leq D + s - n)) \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(j_{sa} + j_{sa}^{ik} - j_{sa} - l - j_{sa}^{ik} + 1)} \sum_{j_{sa}^{ik} = j_{sa}^{ik} + 1}^{j_{sa} - j_{sa}^{ik} + 1} \sum_{i_s = j_{sa}^{ik} + 1}^{j_{sa} - j_{sa}^{ik} + 1}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{ik} = n_{ik_2} - j_{ik} + 1)}^{(n_i - j_{ik} - 1) + 1} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{ik} + j_{ik} - j_{sa} - k_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(n_i - j_{ik} - 1)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{sa}^{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!}$$

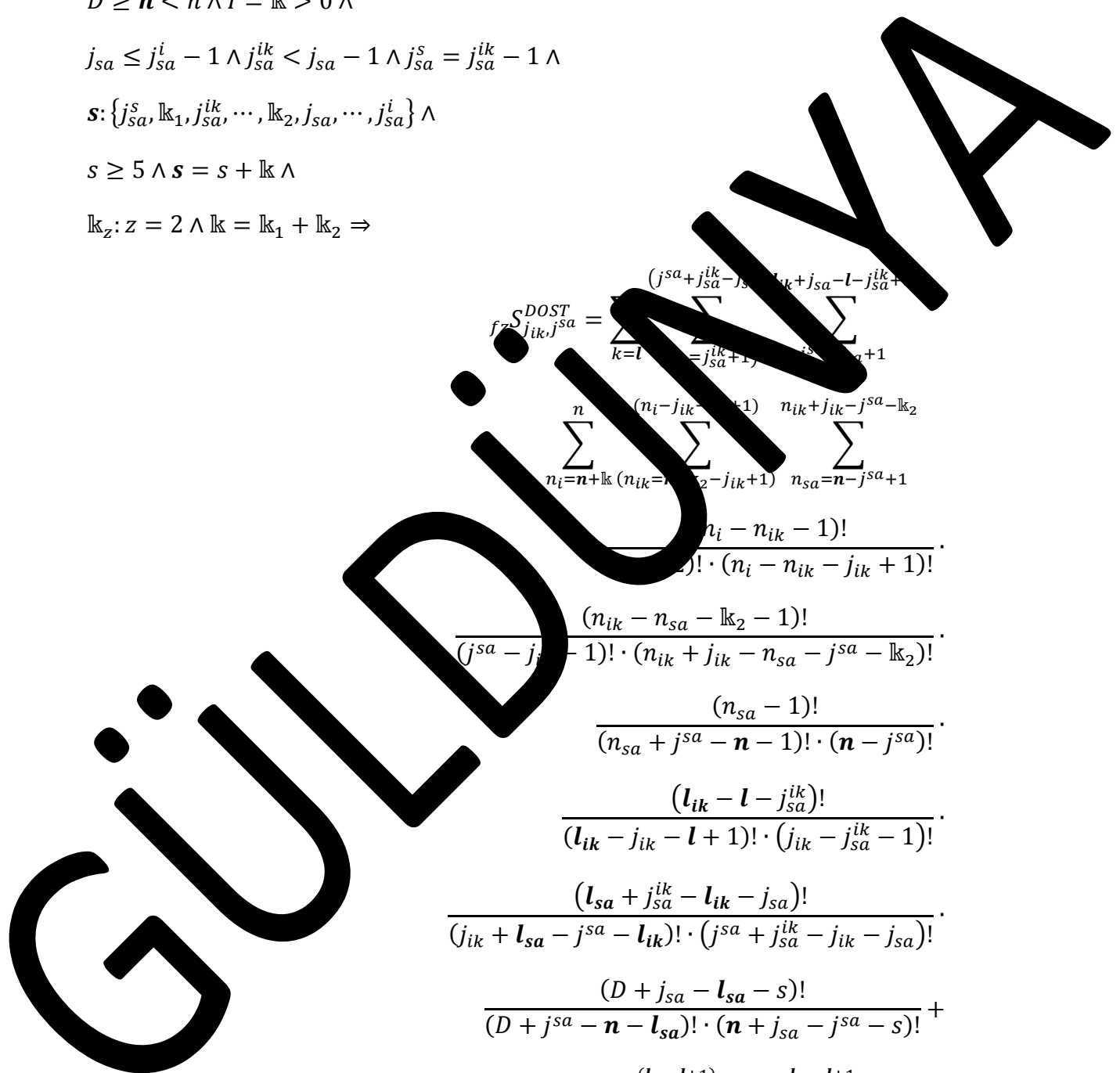
$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} +$$

$$\sum_{k=l}^{(l_{ik} - l + 1)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{j_{sa} = l_{ik} + j_{sa} - l - j_{sa}^{ik} + 2} \sum_{l_{sa} - l + 1}$$





$$\begin{aligned}
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l - l - j_{sa})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} - l_{sa} - j_{sa})!}{(j_{ik} + j_{sa} - j_{sa} - l_{ik})! \cdot (j^{sa} + j_{ik} - j_{sa})!} \cdot \\
 & \frac{(n + j_{sa} - n - s)!}{(n + j_{sa} - n - s)! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{( )} \sum_{j^{sa}=j_{sa}+1}^{l_s+j_{sa}-l} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1}^{( )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{( )} \\
 & \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{ik} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n - s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

$$D \geq n < n \wedge l \neq j_{ik} \wedge l_{sa} \leq D + j_{sa} - n \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik} j_{sa}}^{DOST} = \left( \sum_{k=l} \left( \sum_{j_{sa}+j_{sa}^{ik}-j_{sa}}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{j_{sa}=j_{sa}+1}^{j_{sa}^{ik}+1} \right. \right. \\ \left. \sum_{n_i=n+\mathbb{k}}^n \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{ik}-\mathbb{k}_1} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \right. \\ \left. \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - \mathbb{k}_2 - 1)!}{(j_{sa} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \right. \\ \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \right) + \\ \left( \sum_{k=l} \left( \sum_{j_{ik}=j_{sa}^{ik}+1}^{j_{sa}+j_{sa}^{ik}-j_{sa}-1} \sum_{j_{sa}=j_{sa}+2}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \right. \right. \\ \left. \sum_{n_i=n+\mathbb{k}}^n \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \right. \\ \left. \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \right)$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa})!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa})!} +$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{j_{sa}^{ik}=j_{sa}^{ik+1}}^{(l_{sa}-l+1)} \sum_{n_i=n+l_k}^n \sum_{n_{ik}=n_{sa}-j_{ik}+1}^{(n_i-j_{ik}-1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(n_i - n_{ik} - j_{ik} + 1)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=l} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(j_{sa}^{ik}=j_{sa}^{ik+1})}^{l_s+j_{sa}-l}$$

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$$\frac{\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(\quad)} \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n-s)!} \cdot \frac{(l_s - l + 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - l + 1)!} \cdot \frac{(D - l_i)!}{(D + j_{sa} + s - n - j_{sa}^{ik} - j_{ik} - l)! \cdot (n_{is} - j_{sa} - s)!}}{}$$

$D \geq n < n \wedge l \neq i \wedge l_{sa} \leq D + j_{sa} - n$

$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} - 1$

$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j_{sa} \leq n + j_{sa} - s$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} > l_s$

$D \geq n < n \wedge l = \mathbb{k} > 0$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{ik} = j_{sa}^{ik} - 1$

$s: \{j_{sa}^{i_1}, j_{sa}^{i_2}, \dots, j_{sa}^{i_{\mathbb{k}}}\} \wedge$

$s \geq 5 \wedge s = s - \mathbb{k}$

$\mathbb{k}_2 = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \left( \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \right)$$

$$\begin{aligned}
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \left( \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_{sa}^{l+1}} \sum_{(j^{sa}=j_{ik}+j_{sa}^{ik}+1)}^{j_{sa}^{ik}+1} \right) \cdot \\
 & \sum_{n_i=n+l_{ik}}^n \sum_{(n_i-j_{ik}+1)}^{(n_i-j_{ik}+1)} \sum_{(n_{ik}+j_{ik}-l_{k_2})}^{n_{ik}+j_{ik}-l_{k_2}} \sum_{(n_{sa}=n-j^{sa}+1)}^{n_{sa}=n-j^{sa}+1} \\
 & \frac{(n_i - j_{ik} - 2)!}{(j_{ik} - 2)!} \cdot \frac{(n_i - n_{ik} - j_{ik} + 1)!}{(n_{ik} - l_{sa} - l_{k_2} + 1)!} \cdot \\
 & \frac{(n_{ik} - l_{sa} - l_{k_2} + 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{j_{sa}^{ik}+1} \sum_{j^{sa}=j_{ik}+j_{sa}^{ik}}^{j_{sa}^{ik}} \\
 & \sum_{n_i=n+l_{ik}}^n \sum_{(n_{is}=n+l_{ik}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}-l_{k_1}}^{( )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{( )}
 \end{aligned}$$

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$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$

$l_i \leq D + s - n) \vee$

$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{sa} - j_{sa} + 1 > l_s \wedge$

$l_{sa} \leq D + j_{sa} - n \wedge l_i \leq D + s - n) \wedge$

$D \geq n < n \wedge I = 0 \wedge$

$j_{sa}^i \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa}^{ik} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$

$s: (\mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^s, \dots, j_{sa}^i)$

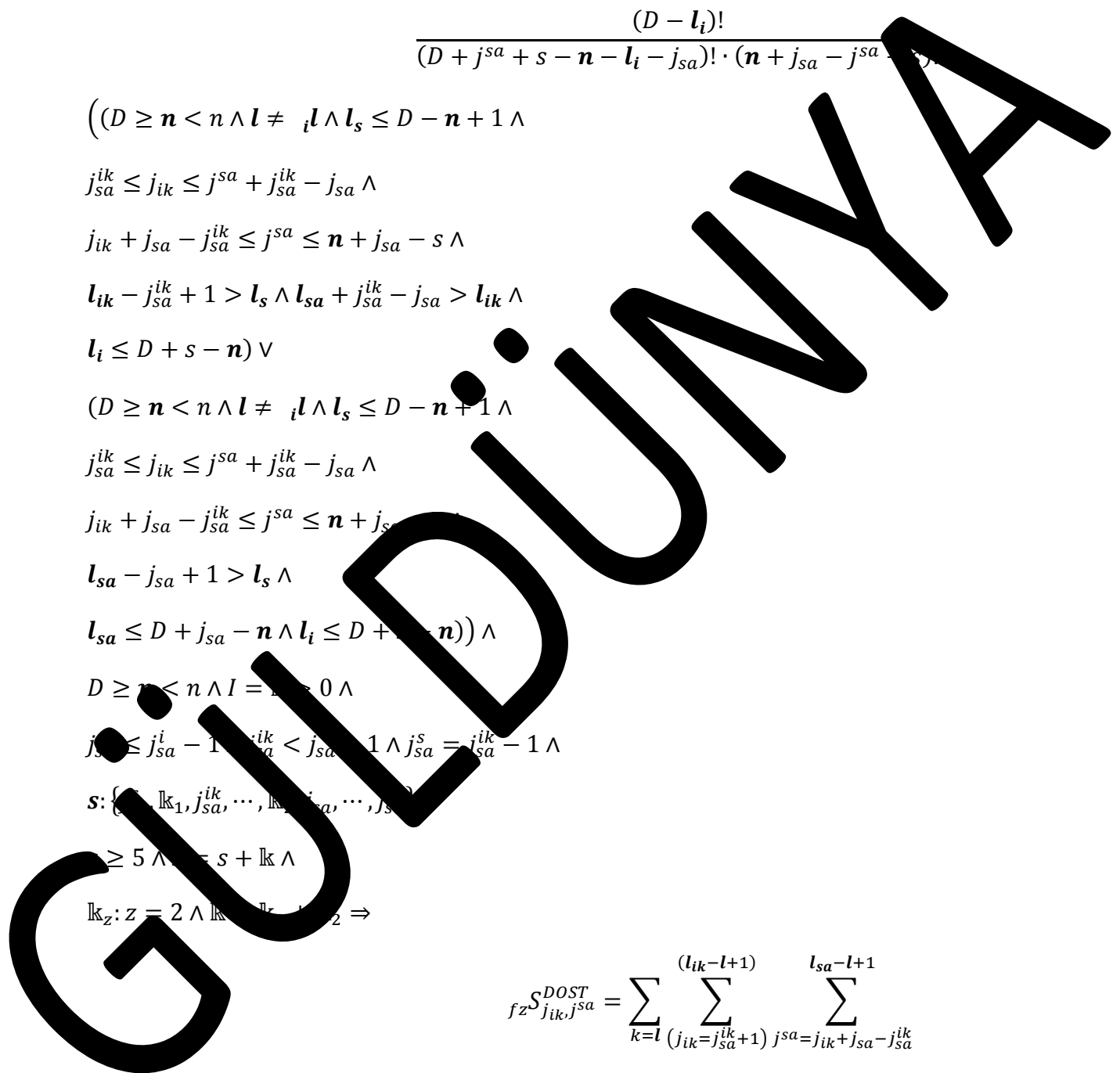
$\mathbb{k}_1 \geq 5 \wedge \mathbb{k}_2 = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k}_1 \leq \mathbb{k}_2 \Rightarrow$

$$f_z^{S_{j_{ik}, j_{sa}^{sa}}} = \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_{sa}-l+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$



$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa})!}{(D + j^{sa} - n - l_{sa})! \cdot (D + j_{sa} - j^{sa})!}$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{j=j_{sa}^{ik} + 1}^{n - j_{sa}^{ik}}$$

$$\sum_{i=n+\mathbb{k}}^{n} \sum_{j=n+\mathbb{k} + j_{sa}^{ik} - j_{ik}}^{(n_i - j_s + 1)}$$

$$\sum_{i=n_i + j_{sa}^s - j_{sa}^{ik} - \mathbb{k}_1}^{(\cdot)} \sum_{j=n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}$$

$$\frac{(2 \cdot n_{is} + j_{sa}^s + j_{sa}^{ik} - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D - n + 1 \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

$$2 \leq l \leq D - l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa} - j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

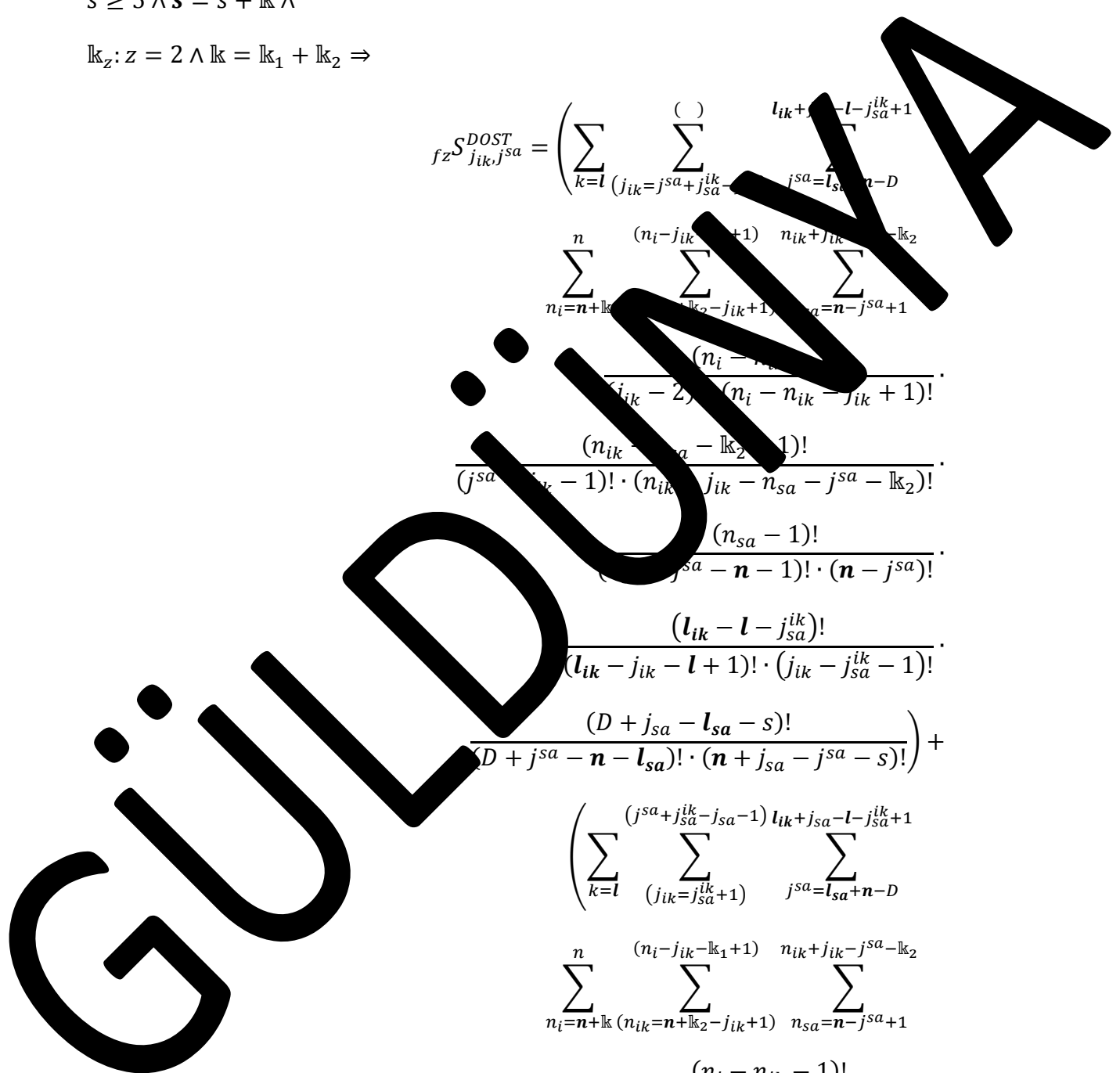
$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 5 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \left( \sum_{k=l} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik})} \sum_{(j_{sa}=l_{sa}+n-D)} \frac{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}{(j_{ik}-2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \right. \\ \left. \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-\mathbb{k}_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \right) + \\ \left( \sum_{k=l} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(j_{sa}+j_{sa}^{ik}-j_{sa}-1)} \sum_{j_{sa}=l_{sa}+n-D}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \right) + \\ \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!}$$





$$\begin{aligned}
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(l_{ik}-l+1)} \sum_{(j_{ik}+j_{sa}-l-j_{sa}^{ik})}^{(l_{ik}-l+1)} \cdot \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}+j_{ik}+1)}^{(n_i-j^{sa}+1)} \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_i-j^{sa}-\mathbb{k}_2)} \cdot \\
 & \frac{(n_i - 1)!}{(j_{ik} - 1)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa}^{ik} - j_{ik} - 1)! \cdot (j_{sa}^{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) - \\
 & \sum_{k=l}^{( )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{( )} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_s+j_{sa}-l} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}
 \end{aligned}$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - l)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$

$2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$

$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$

$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge s = j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s - \mathbb{k}_1, j_{sa}^{ik}, \dots, j_{sa}^i, \dots, j_{sa}\} \wedge$

$s - 5 \wedge s = j_{sa} - \mathbb{k} \wedge$

$\mathbb{k}_2 = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \left( \sum_{k=l} \sum_{(l_{ik}=l+1)} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \right)$$

$$\begin{aligned}
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \left( \sum_{k=l}^{(l_{sa} + n + j_{sa}^{ik} - D - j_{sa} - 1)} \sum_{(j_{ik} = j_{sa}^{ik} + j^{sa} = j_{sa} - l + 1)} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik} + 1}^{n - D} \right) \cdot \\
 & \sum_{n_i = n + k_1}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - k_2} \\
 & \frac{(n_i - n_{ik})!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{k=l}^{(l_{ik} - l + 1)} \sum_{(j_{ik} = l_{sa} + n + j_{sa}^{ik} - D - j_{sa})}^{l_{sa} - l + 1} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik} + 1} \\
 & \sum_{n_i = n + k_1}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - k_2} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
 \end{aligned}$$

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$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (D + j_{sa} - j^{sa} - 1)!}$$

$$\sum_{j_{ik}=l_i+n_{ik}-D-s}^{(l_i+j_{sa}^{ik}-l)}$$

$$\sum_{i=n+l_k}^n \sum_{(n_i=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{i=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1}^{( )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(2 \cdot n_{is} + j_{sa}^s + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D - n > l \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_{ik}+n-D)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{(l_{ik}-l+1)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{(n_{sa}=n-j_{sa}+1)}^{(n_{ik}+j_{ik}+j_{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{sa} - 1)!}{(j_{ik} - l + 1)! \cdot (n_{sa} - j_{ik} + 1)!}$$

$$\frac{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{sa} - j_{sa} - \mathbb{k}_2 - 1)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik}=l_{ik}+n-D)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{(l_s + j_{sa}^{ik} - l)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$

$D \geq n < n \wedge l = k > 0 \wedge$

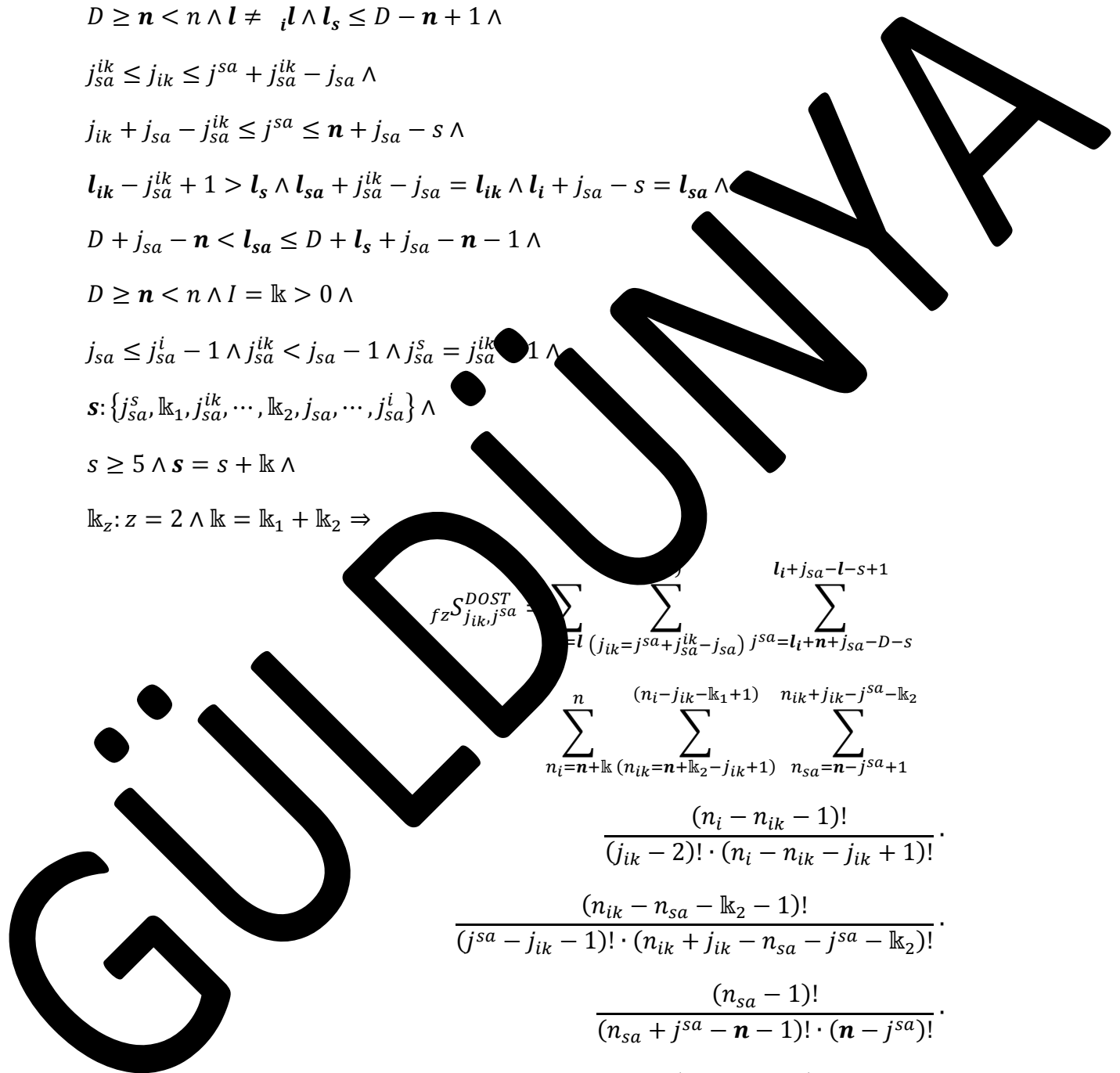
$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 5 \wedge s = s + k \wedge$

$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$

$$fz S_{j_{ik}, j_{sa}}^{DOST} = \sum_{l=1}^{j_{ik} - j_{sa}^{ik} - j_{sa}} \sum_{j_{sa}^{ik} = l + j_{sa} - l - s + 1}^{j_{sa} - l - s + 1} \sum_{j_{sa} = l_i + n + j_{sa} - D - s}^{l_i + j_{sa} - l - s + 1} \sum_{n_i = n + k}^n \sum_{n_{ik} = n + k_2 - j_{ik} + 1}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{ik} + j_{ik} - j_{sa} - k_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$



$$\sum_{k=l}^{\dots} \sum_{\dots}^{( \dots )} \sum_{\dots}^{l_s + j_{sa} - l} \dots$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{\dots}^{(n_i - j_s + 1)} \dots$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - \mathbb{k}_1}^{\dots} \sum_{\dots}^{( \dots )} \dots$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - \mathbb{k}_1)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k}_1)! \cdot (n_{is} - s)!}$$

$$\frac{(l_s - l - \mathbb{k}_1)!}{(l_s + j_{sa}^s - j_{ik} - \mathbb{k}_1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - \dots)!}{(D + j^{sa} + s - n - \dots - j_{sa}^s)! \cdot (n_{is} + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + \dots - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_{sa} - j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n \leq l_{sa} \leq \dots + l_s + j_{sa} - n \wedge$$

$$D \geq n < n \wedge l_{sa} - \mathbb{k}_2 > 0 \wedge$$

$$j_{sa} \leq l_s - 1 \wedge j_{sa}^{ik} < \dots - 1 \wedge j_{sa} = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, \dots, \mathbb{k}_2, j_s, \dots, j_{sa}^i\} \wedge$$

$$s \geq \dots = s + \dots$$

$$\mathbb{k}_z: z = 2, \dots = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z^{S_{j_{ik}, j_{sa}^{ik}}} = \sum_{k=l}^{\dots} \sum_{\dots}^{(l_i + j_{sa}^{ik} - l - s + 1)} \sum_{\dots}^{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{\dots}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{\dots}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}$$

$$n_{sa} = n - j^{sa} + 1$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa} - 1)!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa})!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{\Delta} \sum_{i=0}^{\Delta} \sum_{j=0}^{\Delta} \sum_{m=0}^{\Delta} \sum_{n=n+\mathbb{k}}^{(l_s + j_{sa}^{ik} - l)} \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i - j_s + 1)} \sum_{k=n_{is}+j_{sa}^s - j_{sa}^{ik} - \mathbb{k}_1}^{(\quad)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)} \frac{(2 \cdot n_{is} + j_{sa}^s + l_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot j_{ik} + j_{sa}^{ik} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$D > n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq n + j_{sa}^{ik} - j_{sa} \wedge$

$j_{sa}^{ik} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$

$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$



$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z^{DOST} S_{j_{ik}, j_{sa}} = \sum_{k=l}^{(j_{sa} + j_{sa}^{ik} - j_{sa})} \sum_{(j_{ik} = l_{ik} + n - D)} \sum_{j_{sa} = l_i + j_{sa} - D - s}^{l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1} \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} + \sum_{k=l}^{(l_{ik} - l + 1)} \sum_{(j_{ik} = l_{ik} + n - D)} \sum_{j_{sa} = l_{ik} + j_{sa} - l - j_{sa}^{ik} + 2}^{l_i + j_{sa} - l - s + 1} \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{\binom{D+l_{sa}-l}{j_{ik}=j^{sa}+j_{sa}^{ik}}} \sum_{\substack{0 \leq j_{sa}^{ik} \leq l_{sa} \\ j_{sa}^{ik} = l_{sa} + n_{sa}}} \frac{(n_{sa} + j_{sa}^{ik} - j_{sa} - s)!}{(n_{sa} + j_{sa}^{ik} - j_{sa} - s)!} \cdot \sum_{\substack{0 \leq j_{sa}^{ik} \leq l_{sa} \\ j_{sa}^{ik} = l_{sa} + n_{sa}}} \frac{(n_{sa} + j_{sa}^{ik} - j_{sa} - s)!}{(n_{sa} + j_{sa}^{ik} - j_{sa} - s)!} \cdot \frac{(n_{is} + j_{ik} + j_{sa}^{ik} - n_{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{sa}^{ik} + j_{sa}^s - n_{sa} - j_{sa}^{ik} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq l_i \wedge l \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa}^{ik} \wedge j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik} j^{sa}}^{DOST} = \sum_{k=l} \sum_{(j_{ik}=l_i+n-D)}^{(l_i+n+j_{sa}^{ik}-D-s-1)} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_i+j_{sa}-l-s+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}}$$

$$\frac{(n_i - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l_{sa}^{ik})!}{(l_{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{ik} + j_{sa}^{ik} - l_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(l_{ik}-l+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{l_i+j_{sa}-l-s+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_{sa} + n + j_{sa}^{ik} - D - j_{sa} - l_{ik} - j_{sa} - k)}$$

$$\sum_{n+l_k}^{(n_i - j_s)} \sum_{(n_{is} + l_k + j_{sa}^{ik} - j_{ik})}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^{ik} - l_{k_1}} \sum_{(n_{ik} + j_{ik} - j^{sa} - l_{k_2})}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^{ik} - n_{sa} - j^{sa} - j_{sa}^{ik} - 2 \cdot l_k)!}{(2 \cdot n_{is} + 2 \cdot j_{sa}^{ik} - n_{sa} - j^{sa} - n - j_{sa}^{ik} - 2 \cdot l_k)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j_{sa}^{ik} - s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge l_i \leq D + s - n) \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^l\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_{z} S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{( )} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})}^{( )} \sum_{j_{sa}=j_{sa}+1}^{l+1}$$

$$\sum_{n_i=n+k}^n \sum_{n_{ik}=n_{is}+j_{sa}^{ik}-k_1}^{j_{ik}-k_1+1} \sum_{n_{sa}=n_{is}+j_{sa}-k_2}^{j_{ik}+j_{sa}-j_{sa}-k_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 1)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{ik} - 1)! \cdot (n_{ik} - n_{sa} - j_{sa} - k_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{( )} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})}^{( )} \sum_{j_{sa}=j_{sa}+1}^{l_s+j_{sa}-l}$$

$$\sum_{n_i=n+k}^n \sum_{n_{is}=n+k+j_{sa}^{ik}-j_{ik}}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-k_1}^{( )} \sum_{n_{sa}=n_{ik}+j_{ik}-j_{sa}-k_2}^{( )}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa})!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_{sa} + s - n - j_{sa}$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$j_{ik}, j_{sa}^{OST} = \sum_{k=l} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{j_{sa}^{sa-l+1}} j_{sa}^{sa+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=l} \sum_{\binom{()}{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}} \sum_{l_s+j_{sa}-l}^{l_s+j_{sa}-l} j^{sa=l_i+n+j_{sa}-D-s}$$

$$\sum_{n_i=n+l_k}^n \sum_{\binom{()}{n_i=n+l_k}} \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} (n_i=n+l_k+j_{sa}^{ik}-j_{ik})$$

$$\sum_{n_{ik}=n_i+j_{sa}^s-j_{sa}^{ik}-l_{sa}} \sum_{\binom{()}{n_{sa}=n_{ik}+j_{ik}-l_{ik_2}}} (n_{sa}=n_{ik}+j_{ik}-l_{ik_2})$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot l_k)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot l_k) \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa} - j_{ik} - 1) \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(n + j^{sa} + j_{sa} - n - l_i - j) \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l \neq l \wedge l \leq D - n + 1)$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D + j_{sa} - n < l_{ik} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq l \wedge l \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$D \geq n < n \wedge l = l > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$





$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D + s - n < l_i \leq D + l_{sa} + s - n - j_{sa}) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_i \wedge l_i + j_{sa} - n - j_{sa}^{ik} = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = k_1 + k_2 \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 =$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(j^{sa} + j_{sa}^{ik} - j_{sa})} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_s + j_{sa} - l} \sum_{j_{sa} = l_{sa} + n - D}^{n} \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{ik} + j_{ik} - j_{sa} - k_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{j_{ik} = j_{sa}^{ik} - j_{sa} - l_s + l - k} \sum_{j_{sa} = l_s + j_{sa} - l + k}$$

$$\sum_{n_i = n - j_{ik} - l + 1}^n \sum_{n_{ik} = n + l_{k_2} - j_{ik} - 1}^{j_{ik} - l + 1} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} - j_{sa} - l_{k_2}}$$

$$\frac{(n_i - l + 1)!}{(j_{ik} - l + 1)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(j_{ik} - n_{ik} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - l + 1)! \cdot (j_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l} \sum_{\binom{()}{j_{ik} = j_{sa}^{ik} + j_{sa}^{ik} - j_{sa}}} \sum_{\binom{()}{j^{sa} = l_i + n + j_{sa} - D - s}}^{l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1}$$

$$\sum_{n_i = n + l_{k_2}}^n \sum_{\binom{()}{n_{is} = n + l_{k_2} + j_{sa}^{ik} - j_{ik}}}^{(n_i - j_s + 1)}$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D + s - n < l_i \leq D + l_{sa} + s - n - j_{sa}^{ik} \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$(D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{ik} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$j_{sa}^{ik} \geq 5 \wedge j_{sa}^s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{sa}+n+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_{sa}-l+1} \sum_{j^{sa}=l_{sa}+n-D}$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{l=1}^{(l_s + j_{sa}^{ik})} \sum_{j_{sa}^{ik}=l_{sa} + j_{sa}^{ik} - D - j_{sa}}^{l_{sa} - l + 1} \sum_{j^{sa}=j_{ik} + j_{sa} - j_{sa}^{ik}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -
 \end{aligned}$$

GUIDE

SUMRYA

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(l_{ik}-l+1)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k+j_{sa}^{ik}-j_{sa}^{ik})}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}-k_1} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}^{ik}-k_2)}^{(\quad)} \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - k_1)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot k)! \cdot (n_{is} - s)!} \cdot \frac{(l_s - l - k)!}{(l_s + j_{sa}^{ik} - j_{ik})! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - n - k)!}{(D + j^{sa} + s - n - j_{sa}^{ik} - j_{sa}^{ik} - s)!}$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1) \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_{sa} + j_{sa}^{ik} - j_{sa} \wedge l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1) \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa}^{ik} + 1 > l_s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D + j_{sa} - n < l_i \leq D + l_{sa} + s - n - j_{sa} \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1) \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_{z \neq j_{sa}^{sa}} = \sum_{k=l}^{s_a + j_{sa}^{ik} - j_{sa}^{ik} + j_{sa} - l - j_{sa}^{ik} + 1} \sum_{(j_{ik} = \dots + n - D)} \sum_{j^{sa} = l_{sa} + n - D}$$

$$\sum_{n} \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)} \sum_{n_{sa} = n - j^{sa} + 1}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\begin{aligned}
 & \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_{ik}+n-D)}^{l_{sa}-l+1} j^{sa} = l_{ik} + j_{sa} - l - j_{sa}^{ik} + 2 \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_k-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} + j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_i - 1)!}{(n_i + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - j_{sa} - 1)!}{(n_i - j_{ik} - l_{k_1} + 1)! \cdot (j_{ik} - j_{sa} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{ik} - l_{ik} - j_{sa})!}{(j_{ik} + j_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j^{sa} - l_{sa} - s)!}{(D + j^{sa} - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{( )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{l_s+j_{sa}-l} j^{sa} = l_i + n + j_{sa} - D - s \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}}^{( )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{( )} \\
 & \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot l_k)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot l_k)! \cdot (n - s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

GÜLDÜZYA

$$\left( (D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \wedge$$

$$D + s - n < l_i \leq D + l_{sa} + s - n - j_{sa}) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \wedge$$

$$D < n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$



$$\begin{aligned}
 f_{z} S_{j_{ik}, j^{sa}}^{DOST} = & \sum_{k=l} \sum_{(j_{ik}=l_{ik}+n-D)}^{(l_{sa}+n+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-l+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa} - 1)!}{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - l_{sa} - s)! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})}^{(l_{ik}-l+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{l_{sa}-l+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
 \end{aligned}$$

GÜLDÜZYAN

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)} j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}$$

$$\sum_{n, n+k}^n \sum_{(n_{is} = n - j_{ik})}^{(n_i + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^{ik} - k_1}^{( )} \sum_{(n_{ik} = j_{sa} - k_2)}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - s - j_{sa}^{ik} - 2 \cdot k)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - s - 2 \cdot j_{sa}^{ik} - 2 \cdot k)! \cdot (n - s)!}$$

$$\frac{(D - l - 1)!}{(j_{ik} + j_{sa} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j_{sa} + n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

- $((D \geq n < n \wedge l = l \wedge l_s \leq D - n + 1 \wedge$
- $j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$
- $j_{ik} - j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - s \wedge$
- $l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$
- $D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1) \vee$
- $(D \geq n < n \wedge l \neq l_i \wedge l_s \leq D - n + 1 \wedge$
- $j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$
- $j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - s \wedge$
- $l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$
- $D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1 \wedge$
- $D + s - n < l_i \leq D + l_{sa} + s - n - j_{sa}) \vee$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{( )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(j_{sa}^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik})} \sum_{(l_{ik}+j_{sa}-l-j_{sa}^{ik}+1)} \\ \sum_{(n_i=n+k)} \sum_{(n_{ik}=n+k_2-j_{ik}+1)} \sum_{(n_{sa}=n-j_{sa}+1)} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \\ \sum_{k=l}^{( )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(l_s+j_{sa}-l)} \sum_{(j_{sa}^{sa}=l_i+n+j_{sa}-D-s)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n-s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - l - 1)!}$$

$$\frac{(D - l_i)!}{(D + j_{sa} + s - n - \dots)! \cdot (n_{sa} - j_{sa} - s)!}$$

$D \geq n < n \wedge l = i \wedge l_{sa} \leq D + j_{sa} - n$

$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} - 1$

$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j_{sa} \leq n + j_{sa} - s$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik}$

$D \geq n < n \wedge l = \mathbb{k} > 0$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{ik} = j_{sa}^{ik} - 1$

$s: \{j_{sa}^{ik_1}, j_{sa}^{ik_2}, \dots, j_{sa}^{ik_{\mathbb{k}}}, \dots, j_{sa}^i\} \wedge$

$s \geq 5 \wedge s = s - \mathbb{k} \wedge$

$\mathbb{k}_2 = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \left( \sum_{k=i}^l \sum_{(j_{ik}=j_{sa}^{ik})}^{(\dots)} \sum_{j_{sa}=j_{sa}} \right)$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!}$$

$$\begin{aligned}
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \left( \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!} \right) + \\
 & \left( \sum_{k=i}^l \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{sa}^{i+1}}^{l_{sa}-i+1} \right) \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
 & \frac{(n_i - \mathbb{k} - 1)!}{(n_i - \mathbb{k} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - \mathbb{k}_2 - 1)!}{(n_{ik} - \mathbb{k}_2 - n_{sa} - j_{ik} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{sa} - j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} - j_{sa})!} \cdot \\
 & \left( \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) - \\
 & \sum_{k=i}^l \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{sa}} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \\
 & \frac{(2 \cdot n_i + j_{sa}^{ik} - n_{sa} - j_{ik} - j^{sa} - s - 2 \cdot \mathbb{k} + j_{sa}^s)!}{(2 \cdot n_i - n_{sa} - j^{sa} - n - 2 \cdot \mathbb{k} + j_{sa}^s)! \cdot (n - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}
 \end{aligned}$$

$$D \geq n < n \wedge l = i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge l_i \leq D + s - n \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

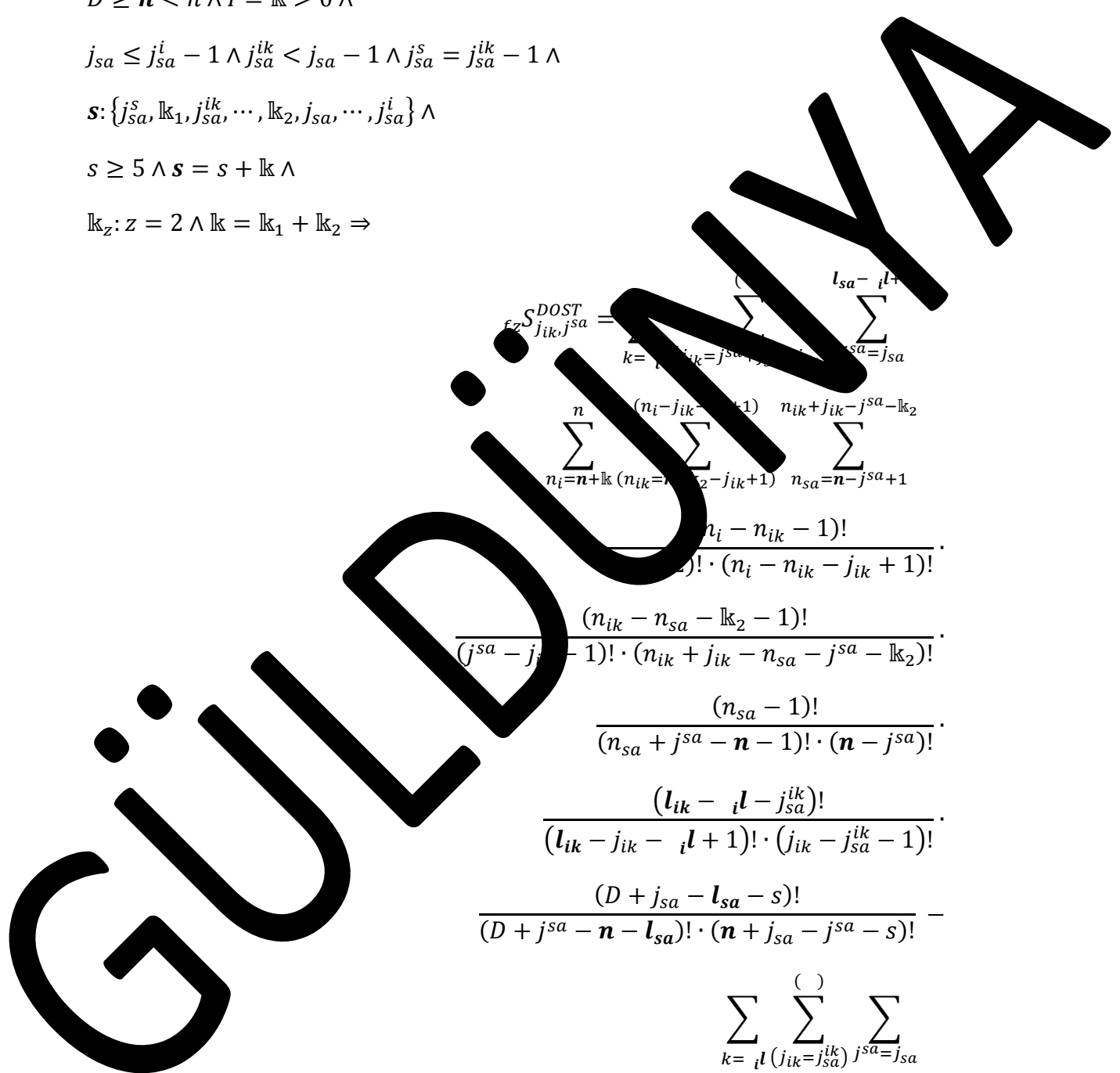
$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z^{DOST} j_{ik}, j_{sa} = \sum_{k=1}^{l_{sa}-i^l} \sum_{j_{sa}=j_{sa}^{ik}}^{l_{sa}-i^l} \sum_{n_i=n+k}^n \sum_{n_{ik}=n_i-j_{ik}+1}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n_{ik}+j_{ik}-j_{sa}-k_2}^{n_{ik}+j_{ik}-j_{sa}-k_2} \frac{(n_i - n_{ik} - 1)!}{(n_i - n_{ik} - j_{ik} + 1)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{sa}^{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - i^l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i^l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=1}^{i^l} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j_{sa}=j_{sa}^{ik}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{ik}=n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n_{ik}+j_{ik}-j_{sa}-k_2}$$



$$\frac{(2 \cdot n_i + j_{sa}^{ik} - n_{sa} - j_{ik} - j^{sa} - s - 2 \cdot \mathbb{k} + j_{sa}^s)!}{(2 \cdot n_i - n_{sa} - j^{sa} - \mathbf{n} - 2 \cdot \mathbb{k} + j_{sa}^s)! \cdot (\mathbf{n} - s)!}$$

$$\frac{(D - l_i)!}{(D + s - \mathbf{n} - l_i)! \cdot (\mathbf{n} - s)!}$$

$$D \geq \mathbf{n} < n \wedge l = {}_i l \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D \geq \mathbf{n} < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\sum_{k=0}^{\binom{D}{i l}} \sum_{j_{sa}^{ik}=j_{sa}}^{l_{sa}-i l+1} \sum_{n_i=\mathbf{n}+\mathbb{k}}^{\mathbf{n}} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \frac{(l_{ik} - {}_i l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - {}_i l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} - s)!}$$

$$\sum_{k=1}^{\lfloor l \rfloor} \sum_{i=1}^{\binom{D-l}{k}} \sum_{j^{sa}=j_{sa}}^{j_{ik}=j_{sa}^{ik}}$$

$$\sum_{n_i=n+\lfloor k \rfloor}^n \sum_{\binom{D-l}{k}} \sum_{n_{sa}=n_{ik}+j_{ik}-j_{sa}}$$

$$\frac{(2 \cdot n_i + j_{sa}^{ik} - n_{sa} - j_{ik} - j^{sa} - s - 2 \cdot \lfloor k \rfloor + j_{sa}^{ik})!}{(2 \cdot n_i - n_{sa} - j^{sa} - n - 2 \cdot \lfloor k \rfloor + j_{sa}^s) \cdot (n-s)!}$$

$$\frac{(D-l)!}{(D+s-l)! \cdot (n-s)!}$$

$D \geq n < n \wedge l = \lfloor l \rfloor \wedge l_s \leq D - n + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$\lfloor l_{ik} \rfloor - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = \lfloor l_{ik} \rfloor \wedge$

$D \geq n < n \wedge l = \lfloor k \rfloor > 0 \wedge$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa} = j_{sa}^i - 1 \wedge$

$s: \{j_{sa}^s, \lfloor k_1 \rfloor, j_{sa}^{ik}, \dots, \lfloor k_2 \rfloor, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 5 \wedge s = s + \lfloor k \rfloor \wedge$

$\lfloor k_2 \rfloor: z \geq 2 \wedge \lfloor k \rfloor = \lfloor k_1 \rfloor + \lfloor k_2 \rfloor \Rightarrow$

$$\sum_{k=1}^{\lfloor l \rfloor} \sum_{i=1}^{\binom{D-l}{k}} \sum_{j^{sa}=j_{sa}}^{l_{ik}+j_{sa}-i-l-j_{sa}^{ik}+1} j_{ik} j_{sa}^{DOST}$$

$$\sum_{n_i=n+\lfloor k \rfloor}^n \sum_{\binom{D-l}{k}} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\lfloor k_2 \rfloor}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \lfloor k_2 \rfloor - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \lfloor k_2 \rfloor)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$



$$\frac{(l_{ik} - i l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!}$$

$$\sum_{k=i}^{\binom{()}{l}} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j_{sa}=j_{sa}^{ik}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n_i-j_{ik}-k_1+1)}^{\binom{()}{n_i-j_{ik}-k_1+1}} \sum_{n_{sa}=n-n_{ik}-k_2}^{\binom{()}{n-n_{ik}-k_2}}$$

$$\frac{(2 \cdot n_i + j_{sa}^{ik} - n_{sa} - j_{ik} - j_{sa}^{ik} - s - 2 \cdot k_1 + j_{sa}^{ik})!}{(2 \cdot n_i - n_{sa} - j_{sa}^{ik} - s - 2 \cdot k_1 + j_{sa}^{ik})! \cdot (n - s)!} \cdot \frac{(D + j_{sa} - n - l_i)!}{(D + j_{sa} - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l = i l \wedge l_s \leq D - n + 1$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n - j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D \geq n < n \wedge l = i l \wedge l_s \leq D - n + 1$$

$$j_{sa}^{ik} \leq j_{sa} - j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{sa} = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^{sa}, k_1, j_{sa}^{ik}, \dots, j_{sa}, \dots, k_2\}$$

$$s \geq 5, k_1 = s + k_2 \wedge$$

$$k_2: z = 2 \wedge k_2 = k_1 + 1 \Rightarrow$$

$$f_Z S_{j_{ik}, j_{sa}^{ik}}^{DOST} = \sum_{k=i}^{\binom{()}{l}} \sum_{(j_{ik}=j_{sa}^{ik})}^{\binom{()}{l_{sa}+j_{sa}^{ik}-i l-j_{sa}+1}} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_k_2-j_{ik}+1)}^{\binom{()}{n_i-j_{ik}-k_1+1}} \sum_{n_{sa}=n-j_{sa}^{ik}+1}^{\binom{()}{n_{ik}+j_{ik}-j_{sa}^{ik}-k_2}} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - i^l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i^l + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!}$$

$$\sum_{k=1}^{\infty} \sum_{(j_{ik}=j_{sa}^{ik})} j^{sa}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_i - j_{ik} - l_{sa} - 1) n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(2 \cdot n_i + j_{sa}^{ik} - n_{sa} - j^{sa} - s - 2 \cdot \mathbb{k} + j_{sa}^s)!}{(2 \cdot n_i + n_{sa} - j^{sa} - n - 2 \cdot \mathbb{k} + j_{sa}^s)! \cdot (n - s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l = i^l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{sa} + j_{sa} - j_{sa} \leq j^{sa} \leq j_{sa} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s - l_{sa} + j_{sa}^{sa} = l_{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > \mathbb{k}_1$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{s_a, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_2: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j^{sa}}^{DOST} = \sum_{k=i^l}^{(l_{ik} - i^{l+1})} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{\substack{(n_i-j_{ik}-\mathbb{k}_1+1) \\ (n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}} \sum_{\substack{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2 \\ n_{sa}=n-j^{sa}+1}} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2 - 1)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - j_{ik} - l_i + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}{(l_{ik} - j_{ik} - l_i + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(j_{sa} - l_i - s)!}{(D + s - n - l_i - s)!} \cdot \sum_{k=i}^{\binom{D}{l_i}} \sum_{j_{ik}=j_{sa}^{ik}} \sum_{j^{sa}=j_{sa}} \sum_{n_i=n+\mathbb{k}}^n \sum_{\substack{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1) \\ (n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}} \frac{(2 \cdot n_i + j_{sa}^{ik} - n_{sa} - j_{ik} - j^{sa} - s - 2 \cdot \mathbb{k} + j_{sa}^s)!}{(2 \cdot n_i - n_{sa} - j^{sa} - n - 2 \cdot \mathbb{k} + j_{sa}^s)! \cdot (n - s)!} \cdot \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l = l_i \wedge l_i \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa}^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} - j_{sa}^{ik} - j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + j_{sa} > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$l_{ik} - j_{sa}^{ik} - n \wedge l_i \leq D + s - n \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$s \geq 5 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_z S_{j_{ik}, j^{sa}}^{DOST} = \sum_{k=i}^l \sum_{(j_{ik}=j_{sa}^{ik})}^{(l_{sa}+j_{sa}^{ik}-i-l-j_{sa}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-1}^{n_{ik}+j_{ik}-j^{sa}-1}$$

$$\frac{(n_i - j_{ik} - \mathbb{k}_1 + 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{sa} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 + 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l - i - j_{sa}^{ik})!}{(l - j_{ik} - j_{sa}^{ik} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(n_{sa} + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!}$$

$$\sum_{k=i}^l \sum_{(j_{ik}=j_{sa}^{ik})}^{(\quad)} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\quad)} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}^{(\quad)}$$

$$\frac{(2 \cdot n_i + j_{sa}^{ik} - n_{sa} - j_{ik} - j^{sa} - s - 2 \cdot \mathbb{k} + j_{sa}^s)!}{(2 \cdot n_i - n_{sa} - j^{sa} - n - 2 \cdot \mathbb{k} + j_{sa}^s)! \cdot (n - s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$(D \geq n < n \wedge l = i \wedge l_s \leq D - n + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l = {}_i l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$l_{sa} \leq D + j_{sa} - n \wedge l_i \leq D + s - n)) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{i=l}^{(l_{ik} - i l + 1)} \sum_{(j_{ik} = j_{sa}^{ik})}^{l_{sa} - i l + 1} \sum_{j_{sa} = j_{sa}}^{(l_{ik} - i l + 1) l_{sa} - i l + 1}$$

$$\sum_{i=n+\mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - i l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=i}^{\binom{()}{}} \sum_{j_{ik}=j_{sa}^{ik}} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{\binom{()}{}} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}}$$

$$\frac{(2 \cdot n_i + j_{sa}^{ik} - n_{sa} - j_{ik} - j^{sa} - s - 2 \cdot \mathbb{k} + j_{sa}^{ik})!}{(2 \cdot n_i - n_{sa} - j^{sa} - n - 2 \cdot \mathbb{k} + j_{sa}^s) \cdot (n - s)!}$$

$$\frac{(D - l_i)}{(D + s - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l = i! \wedge l_{sa} \leq D + j_{sa} - n \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa} = j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_2: z \geq 2 \wedge \mathbb{k} = \mathbb{k}_1 \wedge \mathbb{k}_2 \Rightarrow$$

$$j_{ik}^{OST} j_{sa}^{sa} = \left( \sum_{k=i}^{\binom{()}{}} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{j^{sa}=j_{sa}}^{l_{ik}+j_{sa}-i!-j_{sa}^{ik}+1} \right)$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - i l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!} +$$

$$\left( \sum_{k=i l}^{(j^{sa} + j_{sa}^{ik} - j_{sa} - 1)} \sum_{(j_{ik} = j_{sa}^{ik})} \sum_{j_{sa} = j_{sa} + 1}^{l_{ik} + j_{sa} - i l - j_{sa}^{ik}} \right)$$

$$\sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j_{sa} - k_2}^{n_{ik} + j_{ik} - j_{sa} - k_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - i l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa} - j_{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=i l}^{(l_{ik} - i l + 1)} \sum_{(j_{ik} = j_{sa}^{ik})} \sum_{j_{sa} = l_{ik} + j_{sa} - i l - j_{sa}^{ik} + 2}^{l_{sa} - i l + 1}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - k_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!}$$

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$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - i^l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i^l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=0}^{\lfloor \frac{D - l_i}{2} \rfloor} \sum_{\substack{j_{ik}=j_{sa}^{ik} \\ j^{sa}=j_{sa}^{ik}}} \sum_{\substack{n_i=n+l_k \\ (n_{ik}+j_{sa}^{ik}-j_{ik}-l_{k_1})+n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2}}} \frac{(2 \cdot n_i + j_{sa}^{ik} - n_{sa} - j_{sa} - j^{sa} - 2 \cdot l_k + j_{sa}^s)!}{(2 \cdot n_i - n_{sa} - j^{sa} - n - 2 \cdot l_k + j_{sa}^s)! \cdot (n - s)!} \cdot \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$D \geq n < n \wedge l = i^l \wedge l_{sa} \leq D - j_{sa} - n \wedge$

$j_{sa}^{ik} \leq j_{sa} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} - 1 \leq j^{sa} - n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge j_{sa}^{ik} + j_{sa} - j_{sa}^{ik} > l_{ik} \wedge$

$l_{sa} \geq n < n \wedge l = l_k > 0 \wedge$

$j_{sa} \leq j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} - j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, l_{k_1}, j_{sa}^{ik}, \dots, l_{k_2}, j_{sa}, \dots, j_{sa}^i\} \wedge$

$l_{sa} \geq 5 \wedge s = s + l_k \wedge$

$l_{k_2}: z = 2 \wedge l_k = l_{k_1} + l_{k_2} \Rightarrow$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \left( \sum_{k=i^l}^{(l_{ik} - i^l + 1)} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$



$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_{ik}-l_{k_1}+1) \\ (n_{ik}=n+l_{k_2}-j_{ik}+1)}} \sum_{\substack{n_{ik}+j_{ik}-j^{sa}-l_{k_2} \\ n_{sa}=n-j^{sa}+1}} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - i^l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i^l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \left( \frac{(j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa} - s)!} \right) + \\
 & \left( \sum_{k=i^l}^{(l_{ik}-i^l)} \sum_{\substack{j_{sa}^{ik} \\ j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}} \sum_{l_{sa}^{i^l+1}} \right) \\
 & \sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_{ik}-l_{k_1}+1) \\ (n_{ik}=n+l_{k_2}-j_{ik}+1)}} \sum_{\substack{n_{ik}+j_{ik}-j^{sa}-l_{k_2} \\ n_{sa}=n-j^{sa}+1}} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - i^l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i^l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \left( \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) -
 \end{aligned}$$

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$$\sum_{k=1}^{\infty} \sum_{i=1}^{( )} \sum_{j_{sa}=j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{( )} \sum_{n_{sa}=n_{ik}+j_{ik}-j_{sa}}$$

$$\frac{(2 \cdot n_i + j_{sa}^{ik} - n_{sa} - j_{ik} - j_{sa} - s - 2 \cdot \mathbb{k} + j_{sa}^{ik})!}{(2 \cdot n_i - n_{sa} - j_{sa} - n - 2 \cdot \mathbb{k} + j_{sa}^s) \cdot (n - s)!}$$

$$\frac{(D - l_i)!}{(D + s - l_i)! \cdot (n - s)!}$$

$D \geq n < n \wedge l = i \wedge l_s \leq D - n + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - j_{sa}^{ik} > l_{sa} \wedge$

$l_i \leq D + s - n \wedge$

$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\}$

$s \geq 5 \bullet s = s + \mathbb{k} \wedge$

$\mathbb{k}_z \cdot z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2$

$$f_z^S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=1}^{\infty} \sum_{i=1}^{( )} \sum_{j_{sa}=j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!}$$

$$\sum_{k=1}^{\infty} \sum_{i=1}^{\binom{()}{j_{ik}=j_{sa}^{ik}}} \sum_{j_{sa}=j_{sa}^{ik}}$$

$$\sum_{n_i=n+l_k}^n \sum_{\binom{()}{n_{ik}=n_i-j_{ik}-l_{k_1}+1}} \sum_{n_{sa}=n-l_{k_2}-j_{ik}-j_{sa}^{ik}}$$

$$\frac{(2 \cdot n_i + j_{sa}^{ik} - n_{sa} - j_{ik} - j_{sa}^{ik} - s - 2 \cdot l_{k_1} + l_{k_2})!}{(2 \cdot n_i - n_{sa} - j_{sa}^{ik} - n - 2 \cdot l_{k_1} + l_{k_2} + j_{sa}^{ik})! \cdot (n - s)!}$$

$$\frac{(D - n)!}{(D + s - n - l_{sa})! \cdot (n - s)!}$$

$$((D \geq n < n \wedge l = i l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - s \wedge l_i \leq D + s - n \vee$$

$$(D \geq n < n \wedge l = i l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l = i l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=1}^{(\dots)} \sum_{j_{sa}^{ik}}^{(\dots)} \sum_{j_{sa}}^{(\dots)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n_{ik}+j_{ik}-\mathbb{k}_2}^{n_{ik}+j_{ik}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - j_{ik} + 1)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}{(j_{sa}^{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(n_{sa} - 1)! \cdot (n - j_{sa})!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - j_{sa} - l_{ik})! \cdot (j_{sa} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=1}^{(\dots)} \sum_{j_{sa}^{ik}}^{(\dots)} \sum_{j_{sa}}^{(\dots)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1}^{(\dots)} \sum_{n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}^{(\dots)}$$

$$\frac{(2 \cdot n_i + j_{sa}^{ik} - n_{sa} - j_{ik} - j_{sa} - s - 2 \cdot \mathbb{k} + j_{sa}^s)!}{(2 \cdot n_i - n_{sa} - j_{sa} - n - 2 \cdot \mathbb{k} + j_{sa}^s)! \cdot (n - s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik})) \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2$$

$$\sum_{k=l}^n \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{j^{sa}=l_{sa}+n-D}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\begin{aligned}
 & \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \\
 & \left( \sum_{k=l}^{(j^{sa} + j_{sa}^{ik} - j_{sa} - 1)} \sum_{(j_{ik} = l_{ik} + n - D)} \sum_{j^{sa} = l_{sa} + n - D} \right. \\
 & \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa}} \\
 & \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l_{sa}^{ik})!}{(l_{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{ik} + j_{ik} - l_{sa}^{ik})!}{(j_{ik} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \\
 & \sum_{k=l}^{(l_{ik} - l + 1)} \sum_{(j_{ik} = l_{ik} + n - D)} \sum_{j^{sa} = l_{sa} - l + 1}^{l_{sa} - l + 1} \\
 & \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \\
 & \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}
 \end{aligned}$$

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$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{( )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{l_{ik}+j_{sa}^{ik}-j_{sa}^{ik}+1} \binom{l_{ik}+j_{sa}^{ik}-j_{sa}^{ik}+1}{l_{ik}+n+l_{sa}-D-s}$$

$$\sum_{n+l_{ik}}^{(n_i-j_{sa}^{ik})} \sum_{(n_{is}+l_{ik}+j_{sa}^{ik}-j_{ik})}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-l_{k_1}}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^{ik} - n_{sa} - j^{sa} - j_{sa}^{ik} - 2 \cdot l_{k_1})!}{(2 \cdot n_{is} + 2 \cdot j_{sa}^{ik} - n_{sa} - j^{sa} - n - j_{sa}^{ik} - 2 \cdot l_{k_1})! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 2 \leq l \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik}) \vee$$

$$(D < n < n \wedge l_s > D - n + 1 \wedge$$

$$D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 2 \leq l \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \Big) \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^l\} \wedge$$

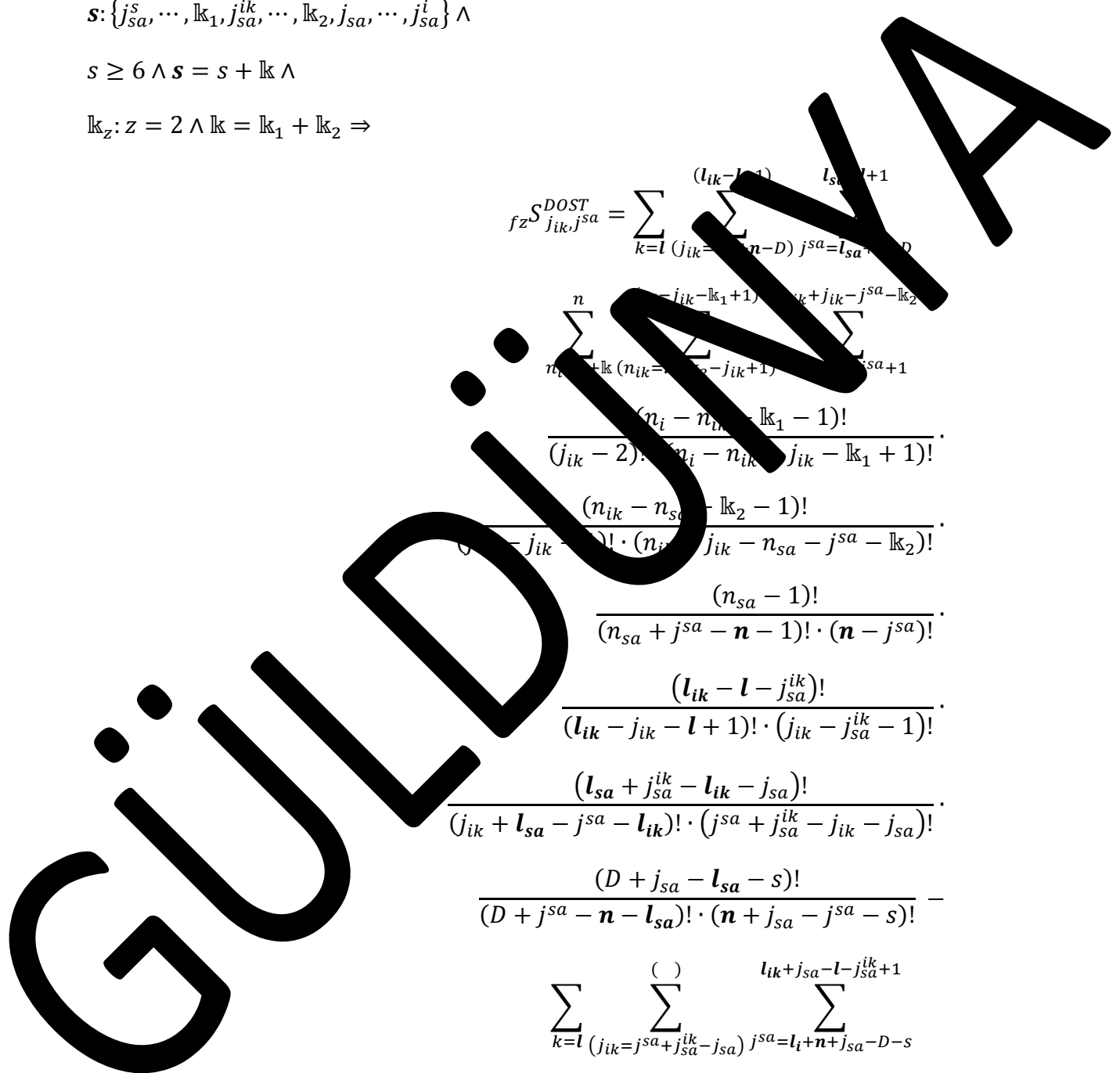
$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z^{S_{j_{ik}j_{sa}^{DOST}}} = \sum_{k=l}^{(l_{ik}-l+1)} \sum_{j_{sa}^{sa} = l_{sa}^{sa} - D}^{l_{sa}^{sa} + 1} \sum_{n_i = n + k}^n \sum_{n_{is} = n + k + j_{sa}^{ik} - j_{sa} - k_2}^{n - j_{ik} - k_1 + 1} \sum_{n_{is} = n + k + j_{sa}^{ik} - j_{sa} - k_2}^{n - j_{ik} - k_1 + 1} \sum_{j_{sa}^{sa} = j_{sa}^{sa} + 1}^{j_{sa}^{sa} + 1} \frac{(n_i - n_{is} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{is} - j_{ik} - k_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(n_{is} - j_{ik} - k_1 - 1)! \cdot (n_{is} - j_{ik} - n_{sa} - j_{sa}^{sa} - k_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa}^{sa} - n - 1)! \cdot (n - j_{sa}^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa}^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa}^{sa} - s)!}$$

$$\sum_{k=l} \sum_{(j_{ik} = j_{sa}^{sa} + j_{sa}^{ik} - j_{sa})} \sum_{l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1}^{(n - j_s + 1)} j_{sa}^{sa} = l_i + n + j_{sa} - D - s$$

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)}$$





$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - l)!} \cdot \frac{(D - l_j)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$(l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik})) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} = 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^{l-1} \wedge j_{sa}^{ik} < j_{sa}^{l-1} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{l-2}, j_{sa}, \dots, j_{sa}^l\} \wedge$$

$$s \geq 6 \wedge s \leq s + \mathbb{k} \wedge$$

$$z = 2 \cdot \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \left( \sum_{k=l} \sum_{(l_{ik}-l+1)} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})} j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}$$

$$\begin{aligned}
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
 & \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \left( \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \right. \\
 & \left. \left( \sum_{k=l}^{n+n+j_{sa}^{ik}-j_{sa}-1} \sum_{(j_{ik}+n-D)}^{n_{sa}-l+1} \sum_{j^{sa}=l_{sa}+n-D} \right) \right) \\
 & \sum_{n_i=n+\mathbb{k}}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{n_{sa}=n-j^{sa}+1} \\
 & \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +
 \end{aligned}$$

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$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{lk}-D-j_{sa})}^{(l_{ik}-l+1)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{lk}+1)}^{l_{sa}-l+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})}$$

$$\frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j^{sa} - l_{k_2})!}$$

$$\frac{(n_i + j^{sa} - n - 1)! \cdot (n - j^{sa} - 1)!}{(n_i - j_{ik} - l_{k_1} + 1)! \cdot (j_{ik} - l_{sa} - 1)!}$$

$$\frac{(l_{sa} + j_{ik} - l_{ik} - j_{sa})!}{(j_{ik} + j_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{lk} - j_{ik} - j_{sa})!}$$

$$\left( \frac{(D + j_{sa} - n_{sa} - s)!}{(D + j_{sa} - n_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) -$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{lk}-D-s)}^{(l_{ik}-l+1)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{lk})}^{(l_{sa}-l+1)}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{lk}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{lk}-l_{k_1}}^{(n_{ik}-l+1)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{(n_{ik}-l+1)}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{lk} - 2 \cdot l_k)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{lk} - 2 \cdot l_k)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{lk} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{lk} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

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$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_{z,j_{ik},j_{sa}}^{DOST} = \left( \sum_{k=l}^{\mathbb{k}} \binom{j_{sa}^{ik} - j_{sa} - 1}{j_{ik} - j_{sa} - k} \binom{j_{sa}^{ik} - j_{sa} - 1}{j_{sa} - j_{sa}^{ik} - k} \sum_{j_{sa} = l_{sa} + n - D}^{j_{sa} - 1} \binom{n}{n_{ik} - n + \mathbb{k}_2 - j_{ik} + 1} \binom{n - j_{sa}^{ik} + \mathbb{k}_1 + 1}{n_{sa} = n - j_{sa} + 1} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \right) + \left( \sum_{k=l}^{\mathbb{k}} \binom{j_{sa}^{ik} - j_{sa} - 1}{j_{ik} = l_s + n + j_{sa}^{ik} - D - 1} \binom{l_s + j_{sa} - l}{j_{sa} = l_{sa} + n - D} \right)$$

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$$\begin{aligned}
& \sum_{n_i=n+\mathbb{k}}^n \sum_{\substack{(n_i-j_{ik}-\mathbb{k}_1+1) \\ (n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}} \sum_{\substack{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2 \\ n_{sa}=n-j^{sa}+1}} \\
& \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=l}^{(l_s+1)-l} \sum_{\substack{j_{ik}^{ik}=n+j_{sa}^{ik}-D-1 \\ j^{sa}=l_s+j_{sa}-l+1}} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{\substack{(n_i-j_{ik}-\mathbb{k}_1+1) \\ (n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}} \sum_{\substack{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2 \\ n_{sa}=n-j^{sa}+1}} \\
& \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +
\end{aligned}$$

$$\begin{aligned}
 & \sum_{k=l} \sum_{(j_{ik}=l_s+n+j_{sa}^{ik}-D-1)}^{(l_s+j_{sa}^{ik}-l)} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-l+1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-k_2} \\
 & \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
 & \frac{(n_i - 1)!}{(n_i + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - j_{ik} - 1)!}{(l_{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - 1)!}{(j_{ik} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \left( \frac{(D + j_{sa} - n - s)!}{(D + j_{sa} - n - s)! \cdot (n + j_{sa} - j^{sa} - s)!} \right) \cdot \\
 & \sum_{k=l} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{( )} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_s+j_{sa}-l} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-k_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{( )} \\
 & \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot k)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot k)! \cdot (n - s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

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$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 2 \leq l \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_{z, l_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_s - l_{ik} - l)} \sum_{(j_{ik} = n + j_{sa}^{ik} - D + l)}^{(l_s - l_{ik} - l)} \sum_{j_{sa} = l_{sa} + n - D}^{l_{sa} - l + 1} \sum_{n_i = n + \mathbb{k}}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{sa} - j_{sa} + 1} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)}^{(l_s + j_{sa}^{ik} - l)} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k + j_{sa}^{ik} - (n_i - j_s + 1))}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - k_1}^{(\quad)} \sum_{(n_{sa} = n_{ik} + j_{sa}^{ik} - k_2)}^{(\quad)}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - \dots)}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot k)! \cdot (n_{is} - s)!}$$

$$\frac{(l_s - l - 1)}{(l_s + j_{sa}^{ik} - j_{ik} - 1) \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - \dots)}{(D + j^{sa} + s - n - \dots - j_{sa})! \cdot \dots + j_{sa} - j^{sa} - s)!}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq l \leq D + l_{ik} + j_{sa} - n - j_{sa} - j_{sa}^{ik} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - \dots - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa} + 1 = l_s \wedge l_{ik} + j_{sa}^{ik} - j_{sa} > \dots$

$D \geq n < n \wedge l_{ik} > 0 \wedge$

$j_{sa} \leq \dots - 1 \wedge j_{sa}^{ik} < \dots - 1 \wedge j_{sa} < j_{sa}^{ik} - 1 \wedge$

$S: \{j_{sa}^s, \dots, j_{sa}^{ik}, \dots, k_1, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq \dots = s + k_1 \wedge$

$k_z: z = 2, \dots = k_1 + k_2 \Rightarrow$

$$f_z S_{j_{ik} j_{sa}}^{DOST} = \left( \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_{sa} + n + j_{sa}^{ik} - D - j_{sa})}^{(l_s + j_{sa}^{ik} - l)} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}} \right.$$

$$\left. \sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{ik} + j_{ik} - j_{sa} - k_2} \right)$$



$$\begin{aligned}
 & \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa})!}{(D + j^{sa} - n - l_{sa})! \cdot (D + j_{sa} - j^{sa})!} + \\
 & \left( \sum_{j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa}}^{l_{sa}+n+j_{sa}^{ik}-D-j_{sa}} \sum_{j_{sa}^{ik}=j_{sa}^{ik}-D-1}^{l_{sa}-l+1} \sum_{n=D}^{n-D} \right) \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{n_{ik}=n_{sa}-j_{ik}+1}^{n_i-j_{ik}-\mathbb{k}_1} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
 & \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{k=l} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})}^{(l_s+j_{sa}^{ik}-l)} \sum_{j_{sa}^{ik}=j_{sa}^{ik}-D-j_{sa}}^{l_{sa}-l+1}
 \end{aligned}$$

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$$\begin{aligned}
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
 & \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l - l - j_{sa})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} - l_{sa} - j_{sa})!}{(j_{ik} + j_{sa} - j_{sa} - l_{ik})! \cdot (j^{sa} - j_{sa}^{ik} - j_{sa})!} \cdot \\
 & \left( \frac{(D + j_{sa} - l_{sa} - s)!}{(n + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) \cdot \\
 & \sum_{k=l}^{(l_s+j_s-1)} \sum_{(j_{ik}-l+n+j_{sa}^{ik}-D-s)}^{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)} \\
 & \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n - s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 \geq l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$fz S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{\binom{l_{ik} + j_{sa} - l}{j_{ik} + j_{sa} - j_{sa}}} \sum_{j_{sa} = l_{sa} + n - D}^{\binom{l_{sa} + j_{sa} - l}{j_{sa} - j_{sa}}} \sum_{n_i = n + k}^{\binom{n_i - j_s + 1}{n_i = n + k + j_{sa}^{ik} - j_{ik}}} \frac{(n_{ik} - k_1 - 1)!}{(n_{ik} - 2)! \cdot (n_{ik} - j_{ik} - k_1 + 1)!} \cdot \frac{(n_{ik} - k_2 - 1)!}{(j_{sa} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \sum_{k=l}^{\binom{l_s + j_{sa} - l}{j_{ik} = j_{sa} + j_{sa}^{ik} - j_{sa}}} \sum_{j_{sa} = l_i + n + j_{sa} - D - s}^{\binom{l_s + j_{sa} - l}{j_{sa} - j_{sa}}} \sum_{n_i = n + k}^{\binom{n_i - j_s + 1}{n_i = n + k + j_{sa}^{ik} - j_{ik}}} \sum_{n_{sa} = n_{ik} + j_{ik} - j^{sa} - k_2}^{\binom{n_{sa} = n_{ik} + j_{ik} - j^{sa} - k_2}{n_{sa} = n_{ik} + j_{ik} - j^{sa} - k_2}}$$



$$\sum_{k=l} \sum_{\binom{()}{j_{ik}=j_{sa}+j_{sa}^{lk}-j_{sa}}} \sum_{\binom{()}{j_{sa}=l_i+n+j_{sa}-D-s}} \sum_{n_i=n+lk}^n \sum_{\binom{()}{n_{is}=n+lk+j_{sa}^{lk}-j_{sa}}} \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{lk}-lk_1} \sum_{\binom{()}{n_{sa}=n_{ik}+j_{sa}^{lk}-j_{sa}-lk_2}} \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - s - j_{sa}^{lk} - lk_1)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - n - 2 \cdot j_{sa} - 2 \cdot lk)! \cdot (n_{is} - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{lk} - 1)!} \cdot \frac{(D - 1)!}{(D + j_{sa} + s - n - j_{sa})! \cdot (n_{is} + j_{sa} - j_{sa} - s)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{lk} + 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{lk} - j_{sa}$$

$$j_{ik} + j_{sa} - j_{sa}^{lk} \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{lk} + 1 \geq l \wedge l_{sa} + j_{sa}^{lk} - j_{sa} = l_{ik} \wedge$$

$$D \geq n < n \wedge I = lk_1 = 0 \wedge$$

$$j_{sa} \leq j_{sa} - 1 \wedge j_{sa}^{lk} < j_{sa} - 1 \wedge j_{sa}^s - j_{sa}^{lk} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, lk_1, j_{sa}^{lk}, \dots, j_{sa}, \dots, j_{sa}\} \wedge$$

$$s \geq 6 \wedge s \leq s + lk \wedge$$

$$lk_2: z \geq 2 \wedge lk = lk_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l} \sum_{\binom{(l_{ik}-l+1)}{j_{ik}=l_{sa}+n+j_{sa}^{lk}-D-j_{sa}}} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{lk}} \sum_{n_i=n+lk}^n \sum_{\binom{(n_i-j_{ik}-lk_1+1)}{n_{ik}=n+lk_2-j_{ik}+1}} \sum_{n_{sa}=n-j_{sa}+1}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa} - 1)!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa})!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{j_{ik}=l_i}^{\sum_{j_{sa}^{ik}=l_s} (l_s + j_{sa}^{ik} - l)} \sum_{j_{sa}^{ik}=n_{sa} - j_{sa}^{ik}}^{\sum_{j_{sa}^{ik}=n_{sa} - j_{sa}^{ik} - D - s}} \sum_{n_{is}=\mathbb{k}}^{\sum_{n_{is}=\mathbb{k} + j_{sa}^{ik} - j_{ik}} (n_i - j_s + 1)} \sum_{n_{sa}=n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}^{(\quad)} \frac{(2 \cdot n_{is} + j_{sa}^s + j_{sa}^s - l_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot j_{ik} + j_{sa}^s - j_{sa}^s - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$D > n \wedge l_s > D - n + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{sa}^{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 \geq l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$

$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z S_{j_{ik} j_{sa}}^{DOST} = \sum_{k=l}^{(l_{sa} + j_{sa}^{ik} - l - j_{sa} + 1)} \sum_{(j_{ik} = l_{ik} + n - D)} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{(n_{sa} = n - j_{sa} - k_2 + 1)}^{(n_{ik} + j_{sa} - j_{sa}^{ik} - k_2)}$$

$$\frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \frac{(n_{ik} - j_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - k_2)!}$$

$$\frac{(n_{sa} - j_{sa} - 1)!}{(n_{sa} - j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(n - l - j_{sa}^{ik})!}{(n_{sa} - j_{sa} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \cdot \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - k_1}^{( )} \sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - k_2)}^{( )}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - s - j_{sa}^{ik} - 2 \cdot k)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot k)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

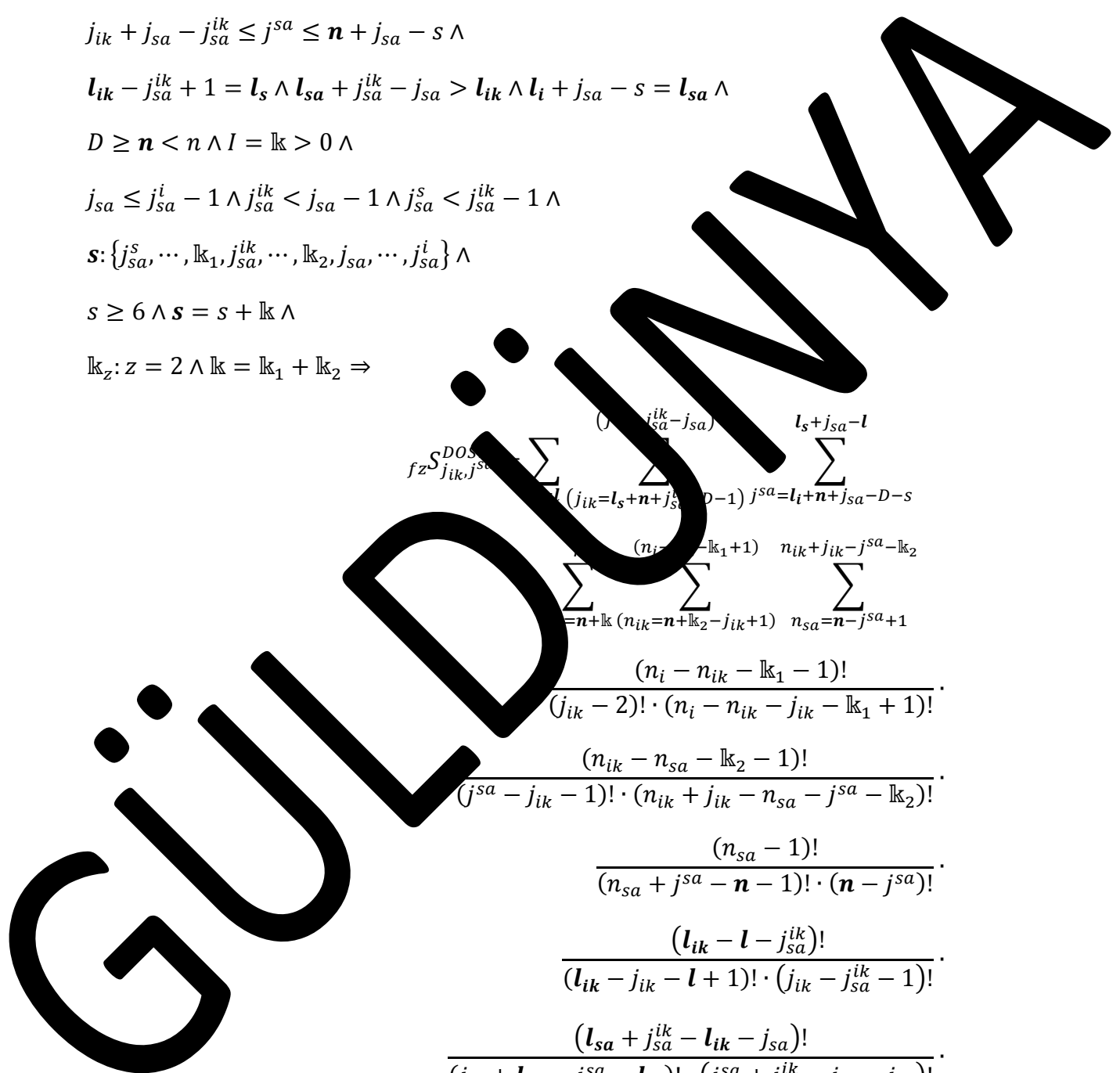
$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned} & \sum_{j_{ik}, j_{sa}^{ik}} f_z^{DOS} \sum_{j_{ik}=l_s+n+j_{sa}^{ik}-1}^{(j_{sa}^{ik}-j_{sa})} \sum_{j_{sa}^{ik}=l_i+n+j_{sa}-D-s}^{l_s+j_{sa}-l} \\ & \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{(n_i-n-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \\ & \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \\ & \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \\ & \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \\ & \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \\ & \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \end{aligned}$$





$$\begin{aligned}
 & \sum_{k=l} \sum_{(j_{ik}=l_s+n+j_{sa}^{ik}-D-1)}^{(l_s+j_{sa}^{ik}-l)} \sum_{j^{sa}=l_s+j_{sa}-l+1}^{l_i+j_{sa}-l-s+1} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
 & \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_i + j^{sa} - n - 1)! \cdot (n - j^{sa})!}{(n_i - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - 1)!}{(j_{ik} + j_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \\
 & \sum_{k=l} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{( )} \sum_{j^{sa}=l_{sa}+n-D}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{( )} \\
 & \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n - s)!} \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z^S j_{sa}^{DOST} = \sum_{k=l}^{(l_i+n+...-D)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(l_i+j_{sa}-l-s+1)} j^{sa=l_i+n+j_{sa}-D-s}$$

$$\sum_{n_{ik}+k}^n \sum_{(n_{ik}=n_{ik}-j_{ik}+1)}^{(n_{ik}-k-k_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-k_2}$$

$$\frac{(n_i - n_{ik} - k_1 - 1)!}{(n_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(n_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!}$$

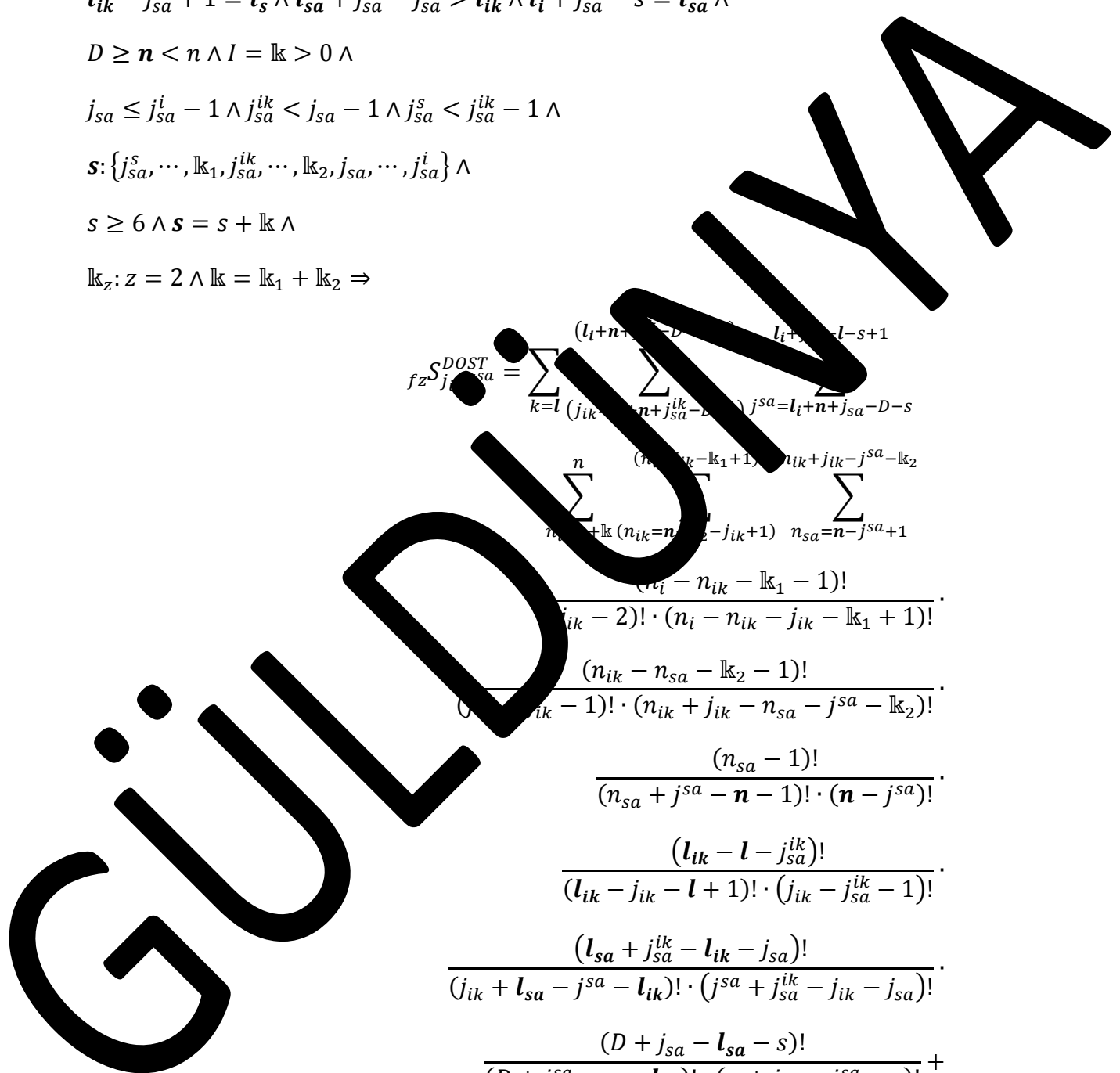
$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l}^{(l_s+j_{sa}^{ik}-l)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{l_i+j_{sa}-l-s+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$



$$\begin{aligned}
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{\substack{(n_i-j_{ik}-\mathbb{k}_1+1) \\ (n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}} \sum_{\substack{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2 \\ n_{sa}=n-j^{sa}+1}} \\
 & \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2 - 1)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l - l - j_{sa})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} - l_{sa} - j_{sa}^{ik} - j_{sa}^{ik})!}{(j_{ik} + j_{sa} - j^{sa} - l_{ik} - 1)! \cdot (j^{sa} + j_{ik} - j_{sa} - j_{sa}^{ik})!} \cdot \\
 & \frac{(n + j_{sa} - n - s)!}{(n + j_{sa} - n - s)! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{i=l}^{(l_{ik}-l)} \sum_{j_{sa}^{ik}=j_{sa}^{ik}-D-j_{sa}}^{j_{sa}^{ik}-D-j_{sa}} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{\substack{(n_i-j_s+1) \\ (n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{\substack{(\quad) \\ (n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}} \\
 & \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n - s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^l - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$j_{ik, j_{sa}}^{ST} = \sum_{k=l} \sum_{\binom{()}{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})}} \sum_{l_{sa}^{l+1}} j^{sa=l_{sa}+n-D}$$

$$\sum_{n_i=n+k}^n \sum_{\binom{(n_i-j_{ik}-k_1+1)}{(n_{ik}=n+k_2-j_{ik}+1)}} \sum_{\binom{n_{ik}+j_{ik}-j^{sa}-k_2}{n_{sa}=n-j^{sa}+1}}$$

$$\frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{\binom{l_s + j_{sa} - l}{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}}} \sum_{n_i = n + \mathbb{k}}^{\binom{n_i - j_s + 1}{n_{is} = n + j_{sa}^{ik} - j_{ik}}} \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n - s)!} \cdot \frac{(l_s + j_{sa} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}{(D - l_s)!} \cdot \frac{(n + j_{sa} + j_{sa}^{ik} - n - l_i - j_{sa}^{ik})! \cdot (n + j_{sa} - j^{sa} - s)!}{(D - l_s)!}$$

$$\begin{aligned} & ((D \geq n < n \wedge l_s > D - n + 1 \wedge \\ & j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee \\ & (D \geq n < n \wedge l_s > D - n + 1 \wedge \\ & j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee \\ & (D \geq n < n \wedge l_s > D - n + 1 \wedge \\ & j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \wedge \\ & D \geq n < n \wedge I = \mathbb{k} > 0 \wedge \end{aligned}$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{sa} + j_{sa}^{ik} - l - j_{sa} + 1)} \sum_{(j_{ik} = l_{sa} + n + j_{sa}^{ik} - D - j_{sa})} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{sa} + 1)} \sum_{(n_{sa} = n - j_{sa}^{ik} - \mathbb{k}_2)}$$

$$\frac{(n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - \mathbb{k}_1} \sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)}^{( )}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n - s)!}$$

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$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}^i, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z \geq 2 \wedge k = k_1 \vee k_2 \Rightarrow$$

$$j_{ik, j_{sa}}^{ST} = \sum_{k=l} \sum_{\binom{()}{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}} \sum_{\binom{()}{j_{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}} \frac{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}{\sum_{n_i=n+k}^n \sum_{\binom{()}{n_{ik}=n+k_2-j_{ik}+1}} \sum_{\binom{()}{n_{sa}=n-j_{sa}+1}}} \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(\quad)} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\quad)} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_s+j_{sa}-l}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}+\mathbb{k})}^{(n_i+\mathbb{k}+1)} \sum_{(n_{is}+\mathbb{k}-j_{ik})}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-\mathbb{k}_2}^{(\quad)} \sum_{(n_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(2 \cdot n_{is} + j_{ik}^s - j_{sa}^s - n_{sa} + j^{sa} - j_{sa}^{ik} - 2 \cdot \mathbb{k})}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n - s)!}$$

$$\frac{(l_{ik} - j_{sa} - l - 1)!}{(l_{ik} - j_{sa} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + \dots - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l_s = D - n + 1 \wedge$$

$$j_{ik}^{ik} + 1 \leq j_{ik} < j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa}^{ik} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$



$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_{ik}+n-D)} j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(j_{sa} + j_{ik} - n - 1)! \cdot (n - j_{sa})!}$$

$$\frac{(l_{ik} - l_{sa}^{ik})!}{(l_{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik}=l_i + n + j_{sa}^{ik} - D - s)} j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{()}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j_{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz^{DOS} j_{ik,j_{sa}} = \sum_{k=l}^{j_{sa}^{ik}-j_{sa}} \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\begin{aligned}
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_{ik}+n-D)}^{l_i+j_{sa}-l-s+1} \sum_{j^{sa}=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_k-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_s=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}} \\
& \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - l_{k_1} - 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j^{sa} - l_{k_2})!} \cdot \\
& \frac{(n_{sa} + j_{sa} - n - 1)!}{(j^{sa} - 1)!} \cdot \\
& \frac{(l_{ik} - j_{sa} - j^{sa})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + j_{sa} - j^{sa} - j_{sa}^{ik} - 1)! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} - \\
& \sum_{k=l}^{( )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{l_s+j_{sa}-l} \sum_{j^{sa}=l_{sa}+n-D} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}}^{( )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \\
& \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot l_k)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot l_k)! \cdot (n - s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
\end{aligned}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz^S j_{ik} \sum_{k=l}^{(l_i+n+j_{sa}^{ik}-D-s-1)} \sum_{(j_{ik}=l_{ik}+n-D)}^{l_i+j_{sa}-l-s+1} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

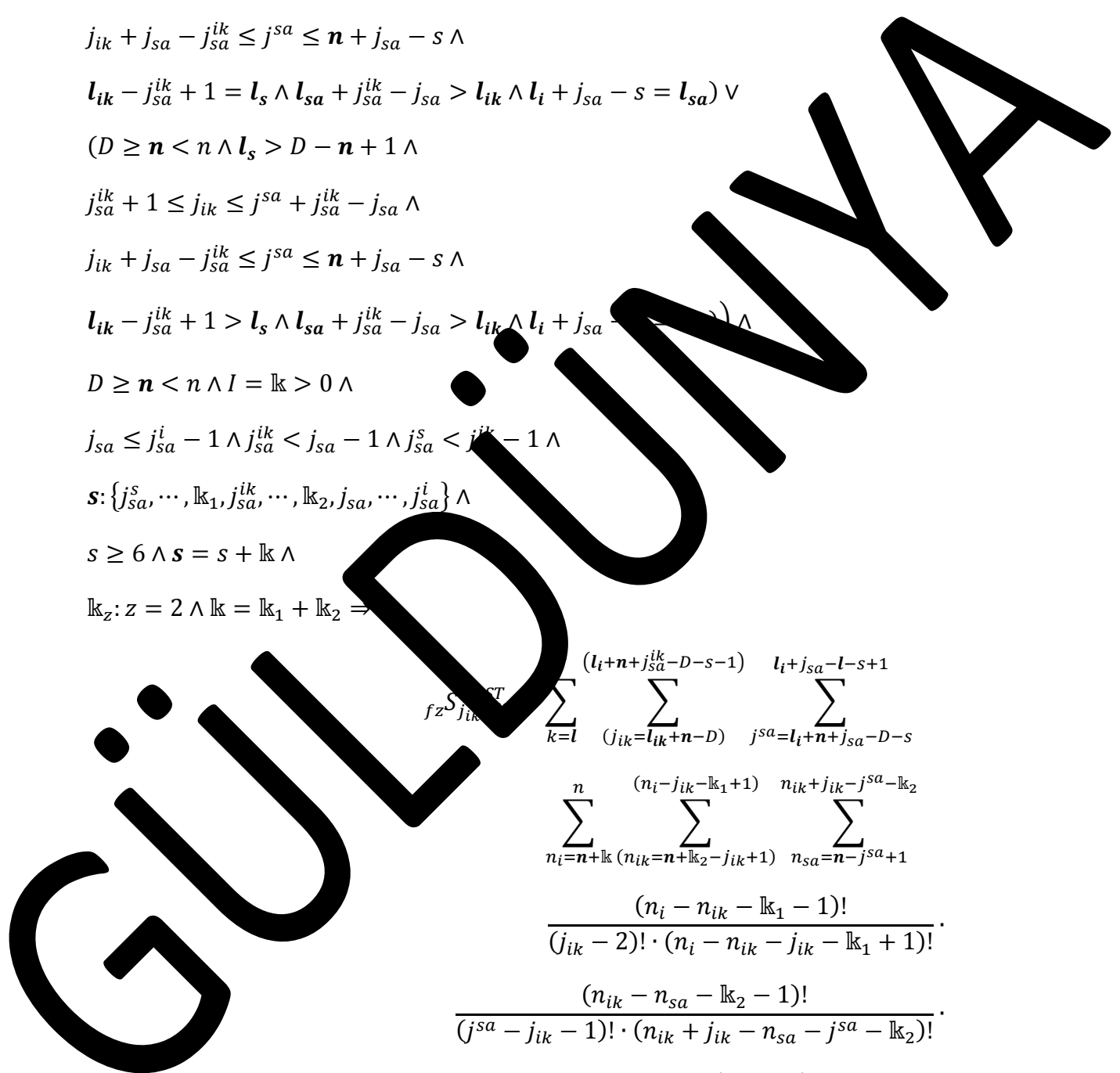
$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{sa}+j_{sa}-n-1}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$



$$\begin{aligned}
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} + \\
& \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{l_i+j_{sa}-l-s+1} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_k-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{(n_{sa}=n+l_k-j_{sa}+1)}^{n_{ik}+j_{sa}-j_{sa}^{ik}-l_{k_2}} \\
& \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_{sa} - l_{k_1} - 1)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j_{sa} - j_{ik} - l_{k_2} - 1)! \cdot (n_{ik} - n_{sa} - j_{sa} - l_{k_2})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} - \\
& \sum_{k=l}^{(l_s+j_{sa}^{ik}-l)} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})}^{(l_s+j_{sa}^{ik}-l)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \\
& \sum_{n_{ik}=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-l_{k_2})}^{(\quad)} \\
& \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - s - j_{sa}^{ik} - 2 \cdot l_k)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot l_k)! \cdot (n - s)!}
\end{aligned}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \wedge$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa} \leq j_{sa}^i \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$\{j_{sa}^s, \dots, j_{sa}^i, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
f_{z^S}^{DOST} S_{j_{ik}, j^{sa}} = & \sum_{k=l}^{(j^{sa} + j_{sa}^{ik} - j_{sa})} \sum_{(j_{ik} = l_{ik} + n - D)} \sum_{j^{sa} = l_{sa} + n - D}^{l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1} \\
& \sum_{n_i = n + l_k}^n \sum_{(n_{ik} = n + l_{k_2} - j_{ik} + 1)}^{(n_i - j_{ik} - l_{k_1} + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - l_{k_2}} \\
& \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(D + j_{sa}^{ik} - l_{sa} - s)!}{(D + j_{sa}^{ik} - l_{sa} - s)! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=l}^{(l_{ik} - l + 1)} \sum_{(j_{ik} = l_{ik} + n - D)}^{l_{sa} - l + 1} \sum_{j^{sa} = l_{ik} + j_{sa} - l - j_{sa}^{ik} + 2}^{l_{sa} - l + 1} \\
& \sum_{n_i = n + l_k}^n \sum_{(n_{ik} = n + l_{k_2} - j_{ik} + 1)}^{(n_i - j_{ik} - l_{k_1} + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - l_{k_2}} \\
& \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
\end{aligned}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{( )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{l_s+j_{sa}-l}^{( )} j^{sa=l_i+n+j_{sa}-D-s}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_i+l_k+1)}^{(n_i+l_k+1)} (n_i+l_k-j_{ik})$$

$$\sum_{n_{ik}=n_i+j_{sa}^{ik}-l_{ik}}^{( )} \sum_{(n_{ik}+j_{sa}-l_{k_2})}^{( )} j^{sa}-l_{k_2}$$

$$\frac{(2 \cdot n_{is} + j_{ik} - j_{sa}^s - n_{sa} + j^{sa} - j_{sa}^{ik} - 2 \cdot l_k)}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - 2 \cdot j_{sa}^{ik} - 2 \cdot l_k)! \cdot (n - s)!}$$

$$\frac{(j_{sa} - l - 1)!}{(j_{sa} - j_{sa}^{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + \dots - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$



$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz_{POST}^{sa} = \sum_{k=l}^{n+j_{sa}^{ik}-j_{sa}-1} \sum_{j_{ik}=k+n-D}^{n+j_{sa}^{ik}-j_{sa}-1} \sum_{j_{sa}=l_{sa}+n-D}^{l_{sa}-l+1} \sum_{j_{ik}=n+\mathbb{k}}^{(n_i-j_{sa}-\mathbb{k}_1+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \sum_{n_{sa}=n-j_{sa}+1}^{n_{sa}} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} +$$

$$\begin{aligned}
 & \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})}^{l_{sa}-l+1} j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}^{ik}}^{n_{ik}+j_{ik}-j_{sa}^{ik}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j_{sa}^{ik} - l_{k_2})!} \cdot \\
 & \frac{(n_i + j_{sa} - n - 1)! \cdot (n - j_{sa}^{ik} - 1)!}{(n_i - j_{ik} - l_{k_1} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa}^{ik})!}{(j_{ik} + j_{sa}^{ik} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa}^{ik} - l_{sa} - s)!}{(D + j_{sa}^{ik} - l_{sa} - s)! \cdot (n + j_{sa} - j_{sa}^{ik} - s)!} \cdot \\
 & \sum_{k=l}^{(l_s+j_{sa}^{ik}-l)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(l_s+j_{sa}^{ik}-l)} j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}}^{( )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-l_{k_2})}^{( )} \\
 & \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j_{sa}^{ik} - s - j_{sa}^{ik} - 2 \cdot l_k)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j_{sa}^{ik} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot l_k)! \cdot (n - s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa}^{ik} - s)!}
 \end{aligned}$$

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$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_{zS}^{DOS1} = \sum_{k=l}^n \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(j_{ik}-k_1+1)} \sum_{(n_{sa}=n-j^{sa}-1)}^{(n_{sa}=l+n+j_{sa}-D-1)} \frac{(n_{sa}-l)!}{(n_{sa}+j^{sa}-n-1)! \cdot (n-j^{sa})!} \cdot \frac{(l_{ik}-l-j_{sa}^{ik})!}{(l_{ik}-j_{ik}-l+1)! \cdot (j_{ik}-j_{sa}^{ik}-1)!} \cdot \frac{(D+j_{sa}-l_{sa}-s)!}{(D+j^{sa}-n-l_{sa})! \cdot (n+j_{sa}-j^{sa}-s)!} \cdot \frac{(n_{ik}-n_{sa}-k_2-1)!}{(n_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-k_2)!} \cdot \frac{(n_{ik}-2)! \cdot (n_i-n_{ik}-j_{ik}-k_1+1)!}{(n_{ik}-n_{sa}-k_1-1)!}$$

$$\sum_{k=l}^n \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(j_{ik}-k_1+1)} \sum_{(n_{sa}=n-j^{sa}-1)}^{(n_{sa}=l+n+j_{sa}-D-s)} \sum_{(n_i=n+k)}^n \sum_{(n_{is}=n+k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{\binom{()}{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}} \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - l)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n_{sa} + j_{sa} - j^{sa} - s)!}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}$

$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j^s < j_{sa}^{ik} - 1$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i, \dots, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$\overset{OST}{j_{ik}, j_{sa}} = \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik}=l_s + n + j_{sa}^{ik} - D - 1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{(l_{sa} + j_{sa}^{ik} - l - j_{sa} + 1)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)} \sum_{j_{sa} = j_{sa} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n: n+k}^n \sum_{(n_{is} = n - j_{ik})}^{(n_{is} + 1)}$$

$$\sum_{(n_{ik} = n_{is} + j_{sa}^{ik} - k_1 - k_2)}^{(n_{ik} - j_{sa} - k_2)}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - s - j_{sa}^{ik} - 2 \cdot k)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - s - 2 \cdot j_{sa}^{ik} - 2 \cdot k)! \cdot (n - s)!} \cdot \frac{(l_{ik} - j_{sa} - l - 1)!}{(l_{ik} + j_{sa} - l - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j_{sa} + l_i - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} < j_{sa} + j_{sa} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - l \wedge$$

$$l_{ik} - j_{sa} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge k >$$

$$j_{sa} - j_{sa} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 0 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$fz S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{( )} \sum_{(j_{ik} = j_{sa} + j_{sa}^{ik} - j_{sa})} \sum_{j_{sa} = l_i + n + j_{sa} - D - s}^{l_i + j_{sa} - l - s + 1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{\substack{(n_i-j_{ik}-\mathbb{k}_1+1) \\ (n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2 - 1)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_s - l - j_{sa})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_s - l - j_{sa} - s)!}{(l_s - j^{sa} - n - 1)! \cdot (n - j^{sa} - s)!}$$

$$\sum_{k=l}^{( )} \sum_{\substack{( ) \\ (j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}}^{l_s+j_{sa}-l} \sum_{j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1}^{( )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{( )}$$

$$\frac{(2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot j_{ik} + 2 \cdot j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$l_s \wedge l_i > D - n + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik} j_{sa}}^{DOST} = \sum_{k=l}^{(l_i + j_{sa}^{ik} - l - s + 1)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - l)} \sum_{(j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})} \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n_i + j_{sa} - j_{ik} + 1)} \sum_{(n_{sa} = n - j_{sa} + 1)}^{(n_{ik} + j_{ik} - \mathbb{k}_2)} \frac{(n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}{(j_{ik} - 2)! \cdot (n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - j_{sa} - \mathbb{k}_2 + 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_{ik} + n - D)} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}} \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - \mathbb{k}_1} \sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)}^{(\quad)}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$((D \geq n < n \wedge l_s > D - n + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$

$(D \geq n < n \wedge l_s > D - n + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \wedge$

$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

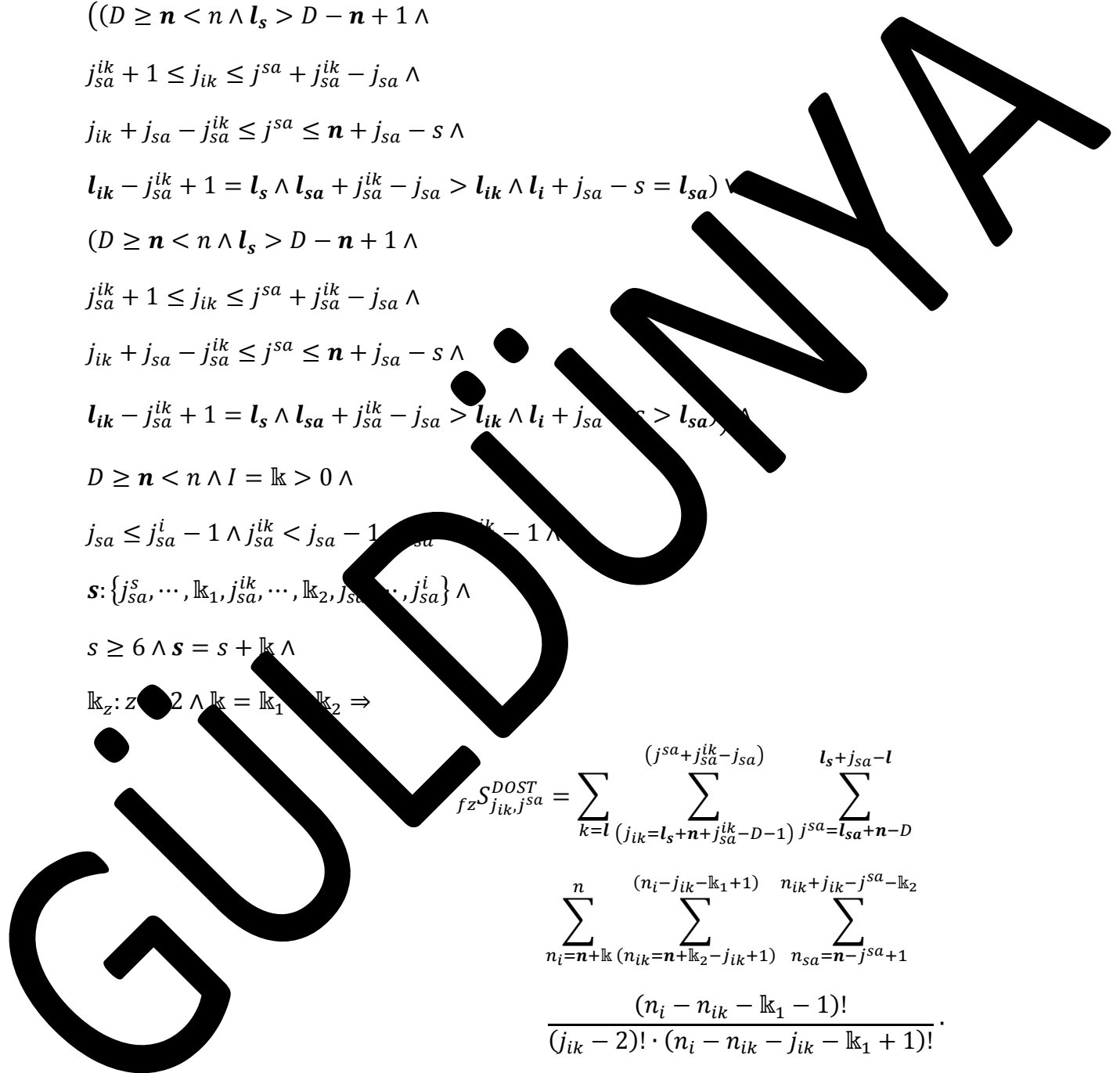
$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i, \dots, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z \geq 2 \wedge \mathbb{k} = \mathbb{k}_1 \vee \mathbb{k}_2 \Rightarrow$

$$fz S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(j^{sa} + j_{sa}^{ik} - j_{sa})} \sum_{(j_{ik} = l_s + n + j_{sa}^{ik} - D - 1)}^{l_s + j_{sa} - l} \sum_{j^{sa} = l_{sa} + n - D}^{n} \sum_{(n_i - j_{ik} - \mathbb{k}_1 + 1)}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{n_{sa} = n - j^{sa} + 1} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$





$$\begin{aligned}
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_s + n + j_{sa}^{ik} - D, j^{sa} = l_s + j_{sa}^{ik} - l + 1)}^{(l_s - l + 1)} \\
 & \sum_{n_i = n + k_1}^n \sum_{(n_i - j_{ik} = k_1 - 1)}^{(n_i - j_{ik} - 1)} \sum_{(n_{ik} = n - j^{sa} + 1)}^{(n_{ik} + j_{ik} - k_2)} \\
 & \frac{(n_{ik} - j_{ik} - k_1 - 1)!}{(j_{ik} - k_1 - 1)! \cdot (n_{ik} - j_{ik} - k_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - j_{ik} - k_2 - 1)!}{(j^{sa} - k_2 - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{( )} \sum_{(j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa})}^{( )} \sum_{(j^{sa} = l_i + n + j_{sa} - D - s)}^{(l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1)} \\
 & \sum_{n_i = n + k_1}^n \sum_{(n_{is} = n + k_1 + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)} \\
 & \sum_{n_{ik} = n_{is} + j_{sa}^{ik} - j_{sa} - k_1}^{( )} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - k_2)}^{( )}
 \end{aligned}$$

GÜLDÜZMAYA

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa})) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1$$

$$s: \{j_s^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\}$$

$$s \cdot 6 \wedge s = j_{sa} \wedge \mathbb{k} \wedge$$

$$\mathbb{k}_z = 2 \wedge \mathbb{k} = \mathbb{k}_1 \vee \mathbb{k}_2 \Rightarrow$$

$$fz_{j_{ik} j_{sa}}^{DOST} = \sum_{k=l}^{(l_{sa} + n + j_{sa}^{ik} - D - j_{sa} - 1)} \sum_{(j_{ik} = l_s + n + j_{sa}^{ik} - D - 1)}^{l_{sa} - l + 1} \sum_{j_{sa} = l_{sa} + n - D}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\begin{aligned}
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{j_{ik}=l_{sa} + n + j_{sa}^{ik} - D - j_{sa}}^{j_{sa} - j_{ik} - j_{sa}} \sum_{j_{sa}=j_{ik} + j_{sa} - j_{sa}}^{j_{sa} - j_{ik} - j_{sa}} \\
 & \sum_{n_i=n+l}^n \sum_{n_{ik}=n+l_k}^{j_{ik}-1} \sum_{n_{sa}=n-j^{sa}+1}^{j_{ik}-j^{sa}-l_k} \\
 & \frac{(n_{ik} - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
 & \frac{(j_{ik} - n_{ik} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (j_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{(l_{ik} - l + 1)} \sum_{j_{ik}=l_i + n + j_{sa}^{ik} - D - s}^{j_{sa} - j_{ik} - j_{sa}} \sum_{j_{sa}=j_{ik} + j_{sa} - j_{sa}}^{j_{sa} - j_{ik} - j_{sa}} \\
 & \sum_{n_i=n+l_k}^n \sum_{n_{is}=n+l_k + j_{sa}^{ik} - j_{ik}}^{(n_i - j_s + 1)}
 \end{aligned}$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{lk}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$

$l_{sa} \leq D + j_{sa} - n \wedge l_i \leq D + s - n \wedge$

$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^{ik} < j_{sa} \wedge j_{sa}^s < j_{sa}^{ik} \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, i\} \wedge$

$s \geq 6 \wedge s = s + \mathbb{k}$

$\mathbb{k} \cdot z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz \mathcal{S}_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_s+j_{sa}-l} \sum_{j^{sa}=j_{sa}+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + j_{sa} - l + 1)}^{(n - j_{ik} - 1)} \sum_{(n_{ik} + j_{ik} - j_{sa} = n - j_{sa} + 1)}^{n_{ik} + j_{ik} - j_{sa} - l + 1} \frac{(n_{ik} - n_{ik} - l_{k_1})!}{(j_{ik} - l_{k_1} - 1)! \cdot (n_{ik} - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \frac{(n_{ik} - n_{ik} - l_{k_2})!}{(j^{sa} - l_{k_2} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{( )} \sum_{(j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa})}^{l_s + j_{sa} - l} \sum_{j^{sa} = j_{sa} + 1}^{( )} \sum_{n_i = n + l_k}^n \sum_{(n_{is} = n + l_k + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - l_{k_1}}^{( )} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - l_{k_2})}^{( )}$$

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$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa})!}$$

$$D \geq n < n \wedge l \neq i \wedge l_{sa} \leq D + j_{sa} - n \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2$$

$$S_{j_{ik}, j_{sa}}^{DOST} = \left( \sum_{k=l} \binom{()}{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{j_{sa}^{ik}=j_{sa}^{ik}+1}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{j_{sa}=j_{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \right)$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\begin{aligned}
 & \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \\
 & \left( \sum_{k=l}^{(j^{sa} + j_{sa}^{ik} - j_{sa} - 1)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)} \sum_{j^{sa} = j_{sa} + 2} \right. \\
 & \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa}} \\
 & \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l_{sa}^{ik})!}{(l_{ik} - j_{ik} - l_{sa}^{ik} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{ik} + j_{ik} - l_{sa}^{ik} - j_{sa}^{ik})!}{(j_{ik} + j_{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}^{ik})!} \cdot \\
 & \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \\
 & \sum_{k=l}^{(l_{ik} - l + 1)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)} \sum_{j^{sa} = l_{ik} + j_{sa} - l - j_{sa}^{ik} + 2}^{l_{sa} - l + 1} \\
 & \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \\
 & \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}
 \end{aligned}$$

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$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{( )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{(j_{sa}=j_{sa}^{ik}+1)}$$

$$\sum_{(n+l_{sa}-j_{sa}^{ik}+1)}^{(n-j_{sa}^{ik})} \sum_{(n+l_{sa}-j_{sa}^{ik}+1)}^{(n-j_{sa}^{ik})} \sum_{(n+l_{sa}-j_{sa}^{ik}+1)}^{(n-j_{sa}^{ik})}$$

$$n_{ik}=n_{is}+j_{sa}^{ik}-l_{k_1} \quad (n_{ik}+j_{ik}-j^{sa}-l_{k_2})$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^{ik} - n_{sa} - j^{sa} - j_{sa}^{ik} - 2 \cdot l_{k_1})!}{(2 \cdot n_{is} + 2 \cdot j_{sa}^{ik} - n_{sa} - j^{sa} - n - j_{sa}^{ik} - 2 \cdot l_{k_1})! \cdot (n - s)!}$$

$$(l_s - l - 1)!$$

$$(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!$$

$$(D - l_i)!$$

$$(D + j_{sa}^{ik} - s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!$$

$$D \geq n < n \wedge l \neq l \wedge l_s \leq n - 1 \wedge$$

$$j_{sa}^{ik} \leq j_{sa} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j_{sa}^{ik} \leq n + j_{sa} - s \wedge$$

$$l_{ik} + j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa}^{ik} - n \wedge$$

$$l_{sa} \leq n \wedge I = l_{k_1} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, \dots, l_{k_2}, j_{sa}, \dots, j_{sa}^l\} \wedge$$

$$s \geq 6 \wedge s = s + l_{k_1} \wedge$$



$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z^{S_{j_{ik}, j^{sa}}} = \left( \sum_{k=l} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(j^{sa}=j_{sa}+1)} \frac{\binom{l_s+j_{sa}-l}{j^{sa}=j_{sa}+1}}{\binom{n_i-j_{ik}-\mathbb{k}_1+1}{n_{ik}=n+\mathbb{k}_2-j_{ik}+1} \binom{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}{n_{sa}=n-j^{sa}+1}} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) +$$

$$\left( \sum_{k=l} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{(j^{sa}=j_{sa}+2)} \frac{\binom{j^{sa}+j_{sa}^{ik}-j_{sa}-1}{j^{sa}=j_{sa}+2}}{\binom{n_i-j_{ik}-\mathbb{k}_1+1}{n_{ik}=n+\mathbb{k}_2-j_{ik}+1} \binom{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}{n_{sa}=n-j^{sa}+1}} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \right)$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{sa} - l + 1} \sum_{j^{sa} = l_s + j_{sa} - l + 1}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa}}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (j^{sa})!} \cdot$$

$$\frac{(l_{ik} - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + j_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\left( \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) -$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{sa} - l + 1} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - \mathbb{k}_1}^{( )} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n - s)!} \cdot$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_{sa} \leq D + j_{sa} - n \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$j_{ik, j_{sa}}^{DOST} = \left( \sum_{k=l}^{(l_{ik}-1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(l_{ik}-1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \right) \cdot \frac{(n_i - n_{ik} - k_1 + 1)}{\sum_{n_{ik}=n+k_2-j_{ik}+1}^{(n_i - n_{ik} - k_1 + 1)}} \cdot \frac{n_{ik} + j_{ik} - j^{sa} - k_2}{\sum_{n_{sa}=n-j^{sa}+1}^{(n_{ik} - n_{sa} - k_2 - 1)}}$$

$$\cdot \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!}$$

$$\cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!}$$

$$\cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) +$$

$$\left( \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(l_{ik}-l+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{l_{sa}-l+1} \right)$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2} - 1)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l - l - j_{sa})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} - l_{sa} - j_{sa} - j_{sa})!}{(j_{ik} + j_{sa} - j_{sa} - l_{ik})! \cdot (j^{sa} + j_{ik} - j_{sa})!} \cdot \\
 & \left( \frac{(D - j_{sa} - l_{sa} - s)!}{(n + j^{sa} - n - l_{sa})! \cdot (n + j^{sa} - j^{sa} - s)!} \right) \cdot \\
 & \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l-1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}}^{( )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \\
 & \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot l_k)!}{(2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot l_k)! \cdot (n - s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - n \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z^{DOST} = \left( \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}^{l_{sa} - l + 1} \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \frac{(n_i - j_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_{sa}^{ik} - l + 1)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{sa}^{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \right) \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \left( \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{sa} - l + 1} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik} + 1}^{l_{sa} - l + 1} \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \right)$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa} - 1)!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa}^{ik})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (n_{sa} + j_{sa}^{ik} - j_{ik} - l_{sa})!} \cdot \frac{(D + j^{sa} - l_{sa} - (n_{sa} + j_{sa}^{ik} - j_{ik} - l_{sa} - s))!}{(D + j^{sa} - n - j^{sa} - l_{sa} - (n_{sa} + j_{sa}^{ik} - j_{ik} - l_{sa} - s))!} \cdot \sum_{k=j_{sa}^{ik}+1}^{n_{sa}+j_{sa}^{ik}-j_{ik}} \sum_{a=j_{ik}+j_{sa}-j_{sa}^{ik}}^{n_{sa}+j_{sa}^{ik}-j_{ik}} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{( )}$$

$$\frac{(2 \cdot n_{is} + j_{sa}^s + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + j_{sa}^s + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

- $n_{sa} \wedge l \neq l \wedge l_s \leq D - n + 1 \wedge$
- $j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$
- $j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$
- $l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$

$$l_{sa} \leq D + j_{sa} - n \wedge l_i \leq D + s - n \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{sa} + 1} \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n_{sa} + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}^{(n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)} \frac{(n_i - n_{sa} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik})! \cdot (j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{sa} + 1} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{\binom{()}{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}} \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - l)!} \cdot \frac{(D - l_j)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$

$2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$

$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$

$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge s < j_{sa}^{ik} - 1$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\}$

$s \cdot 6 \wedge s = s \cdot \mathbb{k} \wedge$

$\mathbb{k}_2 = 2 \wedge \mathbb{k} = \mathbb{k}_1 \wedge \mathbb{k}_2 \Rightarrow$

$$f_z S_{j_{ik} j_{sa}}^{DOST} = \left( \sum_{k=l} \sum_{\binom{()}{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}} \sum_{j^{sa}=l_{sa}+n-D}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{\substack{(n_i-j_{ik}-\mathbb{k}_1+1) \\ (n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{n_{sa}=n-j^{sa}+1} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \right)$$



$$\begin{aligned}
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \left( \sum_{k=l}^{(j^{sa} + j_{sa}^{ik} - j_{sa} - 1)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1} \sum_{j_{sa} = l_{sa} - n - D}^{n - D} \right) \cdot \\
 & \sum_{n_i = n + \mathbb{k}_1}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 - 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \\
 & \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{k=l}^{(l_{ik} - l + 1)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{sa} - l + 1} \sum_{j_{sa} = l_{sa} + j_{sa} - l - j_{sa}^{ik} + 2}^{l_{sa} - l + 1} \\
 & \sum_{n_i = n + \mathbb{k}_1}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \\
 & \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
 \end{aligned}$$

GÜLDÜZ

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (D + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=0}^{j_{sa} - l - j_{sa}^{ik} + 1} \binom{j_{sa} - l - j_{sa}^{ik} + 1}{k} (j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}) j^{sa} - D - s$$

$$\sum_{i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{i=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1}^{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(2 \cdot n_{is} + j_{sa}^s + j_{sa}^{ik} - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D + n - l_i \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$D + l_{ik} + j_{sa}^{ik} - n - l_{sa} - j_{sa}^{ik} + 2 \leq l \leq i - 1 \wedge$$

$$j_{sa}^{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_Z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(l_{ik}-l+1)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{(l_{ik}-l+1)} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_{sa}+1)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(n_{ik}+j_{sa}-\mathbb{k}_2)} \frac{(n_{is}-n_{ik})!}{(j_{ik}-2)! \cdot (n_{is}-n_{ik}-j_{ik}-\mathbb{k}_1+1)!} \cdot \frac{(n_{ik}-j_{sa}-\mathbb{k}_2-1)!}{(j_{sa}^{ik}-j_{ik}-1)! \cdot (n_{ik}-j_{ik}-n_{sa}-j_{sa}-\mathbb{k}_2)!} \cdot \frac{(n_{sa}-1)!}{(j_{sa}-n-1)! \cdot (n-j_{sa})!} \cdot \frac{(l_{ik}-l-j_{sa}^{ik})!}{(l_{ik}-j_{ik}-l+1)! \cdot (j_{ik}-j_{sa}^{ik}-1)!} \cdot \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(l_{sa}+l_{sa}-j_{sa}-l_{ik})! \cdot (j_{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot \frac{(D+j_{sa}-l_{sa}-s)!}{(D+j_{sa}-n-l_{sa})! \cdot (n+j_{sa}-j_{sa}-s)!}$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(l_{ik}-l+1)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_{sa}+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{( )}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik}$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$S_{j_{ik}, j_{sa}}^{DOST} = \left( \sum_{k=l} \sum_{\binom{()}{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}} \sum_{j^{sa}=l_{sa}+n-D}^{l_s+j_{sa}-l} \right)$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\begin{aligned}
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \\
& \left( \sum_{k=l}^{(j^{sa} + j_{sa}^{ik} - j_{sa} - 1)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_s + j_{sa} - l} \sum_{j^{sa} = l_{sa} + n - D}^{l_s + j_{sa} - l} \right) \\
& \sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_1 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - k_2} \\
& \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - k_1 - n_{ik} - k_1 + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1) \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \\
& \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_s - l + 1} \sum_{j^{sa} = l_{sa} + n - D}^{l_s - l + 1} \\
& \sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - k_2} \\
& \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot
\end{aligned}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \left( \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) \sum_{k=l}^{( )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(l_i+n+j_{sa}-D)} \sum_{(j_s+1)} \sum_{(n_{is}+l_{ik}(n_{is}=n+l_{ik}+j_{sa}^{ik}-j_{ik}))} \sum_{(n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{ik_1})} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \frac{(n_{is} + j_{ik} + j_{sa} - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot l_{k_2})!}{(2 \cdot n_{is} + 2 \cdot j_{sa}^s + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot l_{k_2})! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\begin{aligned} & \geq n < n \wedge l \neq i l \wedge l \leq D - n + 1 \wedge \\ & D + l_{sa} + j_{sa} - n_{sa} - j_{sa}^{ik} + 2 \leq l \leq i l - 1 \wedge \\ & j_{sa}^{ik} \leq j_{ik} - j_{sa}^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge \\ & j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge \\ & D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge \\ & D \geq n < n \wedge l = l_{k_2} > 0 \wedge \\ & j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge \end{aligned}$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z S_{j_{ik} j_{sa}}^{DOST} = \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{sa} - l + 1} \sum_{j_{sa} = l_{sa} + n}^{n} \sum_{n_i = n + k}^{(n_i - j_{ik} - k_1 + 1)} \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{n_{ik} + 1 - j_{sa} - k_2} \sum_{(n_{sa} = n - j_{sa} + 1)}^{n_{sa} - 1} \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - k_2)!} \cdot \frac{(n_{sa} - n - 1)!}{(n_{sa} - j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(n - l - j_{sa}^{ik})!}{(n_{sa} - l - j_{sa}^{ik} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)}^{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}} \sum_{n_i = n + k}^n \sum_{(n_{is} = n + k + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - k_1} \sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - k_2)}^{( )}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - s - j_{sa}^{ik} - 2 \cdot k)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot k)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i_l \wedge l_s \leq D - n + 1 \wedge$$

$$2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2$$

$$fz S_{j_{ik} j_{sa}} = \binom{l_{ik} - l + 1}{l} \sum_{j_{ik} = l_{sa} + n + j_{sa}^{ik} - D - j_{sa}}^{l_{ik} - l + 1} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i = n + k}^n \sum_{n_{ik} = n + k_2 - j_{ik} + 1}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - k_2}$$

$$\frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$



$$\begin{aligned}
 & \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \\
 & \left( \sum_{k=l}^{l_{sa}+n+j_{sa}^{ik}-D-j_{sa}-1} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_{sa}-l+1} \sum_{j^{sa}=l_{sa}+n-D}^{n_{ik}+j_{ik}-j^{sa}-1} \right. \\
 & \sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-1} \\
 & \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l_{sa}^{ik})!}{(l_{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{ik} - j_{sa}^{ik} + j_{ik} - l_{sa}^{ik})!}{(j_{ik} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \\
 & \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})}^{l_{sa}-l+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{n_{ik}+j_{ik}-j^{sa}-k_2} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-k_2} \\
 & \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}
 \end{aligned}$$

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$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D) \wedge (j_{sa}^{ik}=j_{ik}-j_{sa}^{ik})}$$

$$\sum_{(n+l_k) \wedge (n_{is}+l_k+j_{sa}^{ik}-j_{ik})}^{(n-j_{sa})}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-l_{k_1} \wedge (n_{ik}+j_{ik}-j^{sa}-l_{k_2})}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^{ik} - n_{sa} - j^{sa} - j_{sa}^{ik} - 2 \cdot l_k)!}{(2 \cdot n_{is} + 2 \cdot j_{sa}^{ik} - n_{sa} - j^{sa} - n - j_{sa}^{ik} - 2 \cdot l_k)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j_{sa}^{ik} - s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l = l \wedge l_s \leq D - n - 1 \wedge$$

$$2 \leq l \wedge D + l_{ik} + j_{sa}^{ik} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge l = l_k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, \dots, l_{k_2}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j^{sa}}^{DOST} = \left( \sum_{k=l} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})}^{(l_s+j_{sa}^{ik}-l)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{ik}} \right. \\ \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-1} \\ \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\ \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\ \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\ \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\ \left. \frac{(l_{sa} - l - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \\ \left( \sum_{k=l} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(l_{sa}+n+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-l+1} \right. \\ \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\ \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\ \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\ \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\ \left. \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \right)$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})}^{(l_s+j_{sa}^{ik}-l)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1)}^{l_{sa}-l+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_k-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{(n_s=n+l_k-j_{sa}^{ik}+1)}^{(n_{ik}+j_{sa}-j^{sa}-l_{k_2})}$$

$$\frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_{sa} - l_{k_1} - l_{k_1} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - l_{k_2} - (n_{ik} + j_{sa} - n_{sa} - j^{sa} - l_{k_2}) - 1)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

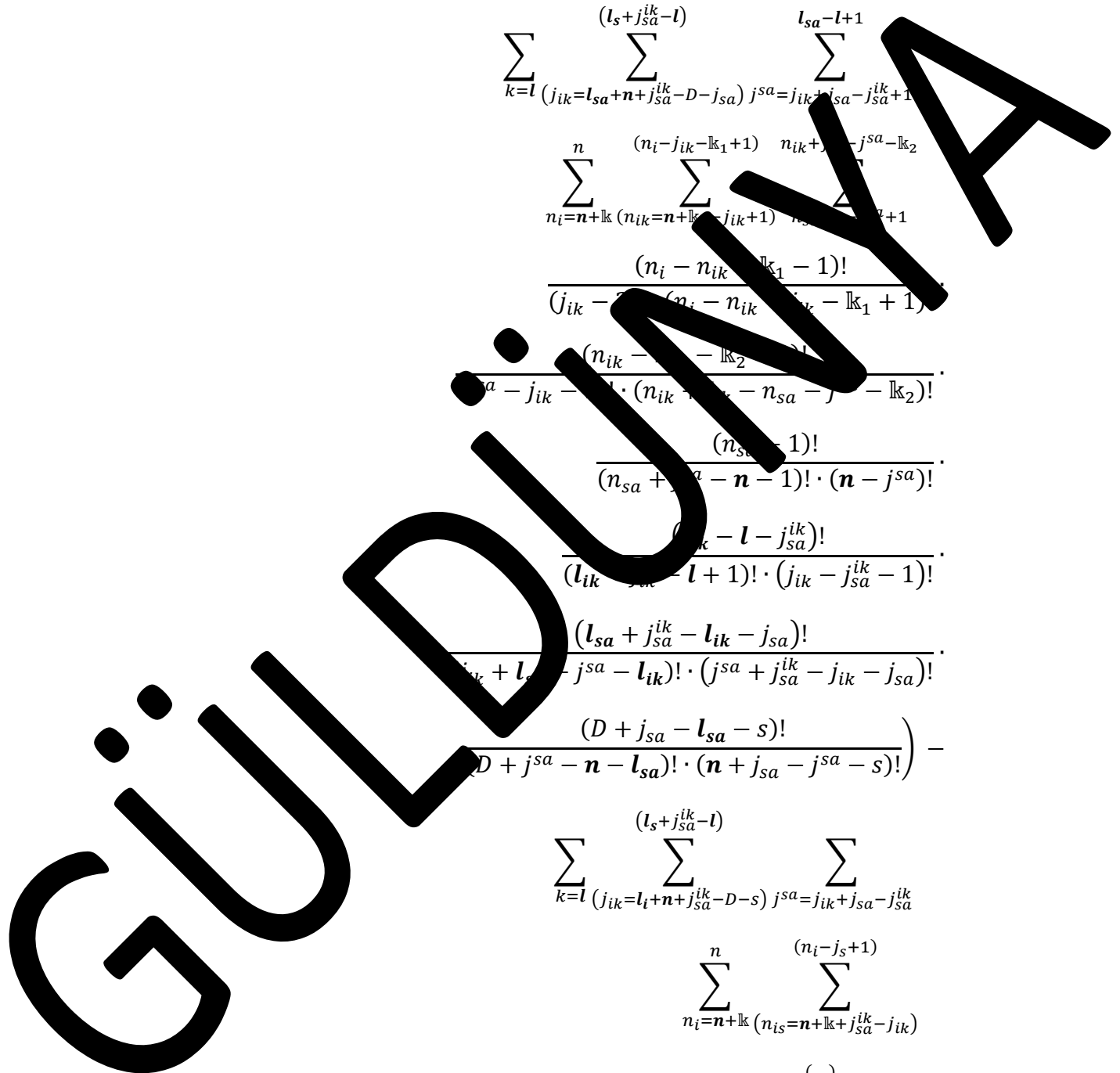
$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=l} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(l_s+j_{sa}^{ik}-l)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{( )}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot l_k)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot l_k)! \cdot (n - s)!}$$



$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_2: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$\sum_{k=l}^{l+1} \sum_{j_{ik}=j_{sa}^{ik}+1}^{n} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{n} \sum_{n_i=n+k}^n \sum_{n_{ik}=n+k_2-j_{ik}+1}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-k_2} \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} + j_{sa}^{ik} - j_{sa}^{ik})}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - \mathbb{k}_1} \sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)}^{(\quad)}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - \dots)}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n_{is} - s)!}$$

$$\frac{(l_s - l - \dots)}{(l_s + j_{sa}^{ik} - j_{ik} - \dots) \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - \dots)}{(D + j^{sa} + s - n - \dots - j_{sa}^{ik})! \cdot \dots + j_{sa} - j^{sa} - s)!}$$

$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa}^{ik} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa}^{ik} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l \wedge l_{sa} + j_{sa}^{ik} - j_{sa}^{ik} = l_{ik} \wedge$

$l_{ik} \leq D + j_{sa}^{ik} - n \wedge l_{sa} \leq D + s - n \wedge$

$D \geq n < n \wedge l_{sa} - \mathbb{k}_2 > 0 \wedge$

$j_{sa} \leq j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} < j_{sa}^{ik} - 1 \wedge j_{sa} < j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \dots, \mathbb{k}_z, j_{sa}^s, \dots, j_{sa}^i\} \wedge$

$s \geq \dots = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \dots = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{sa} + j_{sa}^{ik} - l - j_{sa} + 1)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa} - 1)!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa})!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=0}^{l_s + j_{sa}^{ik} - j_{sa}^{ik} - 1} \sum_{l=0}^{j_{sa}^{ik} - j_{sa}^{ik} - 1} \sum_{m=0}^{n_i - j_s + 1} \sum_{n+k}^{(n_i - j_s + 1)} \sum_{(n_{is} = n+k+j_{sa}^{ik} - j_{ik})} \sum_{k=n_{is} + j_{sa}^s - j_{sa}^{ik} - \mathbb{k}_1}^{( )} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}$$

$$\frac{(2 \cdot n_{is} + j_{sa}^s + l_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot j_{ik} + j_{sa}^s - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D - l_i) \leq n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

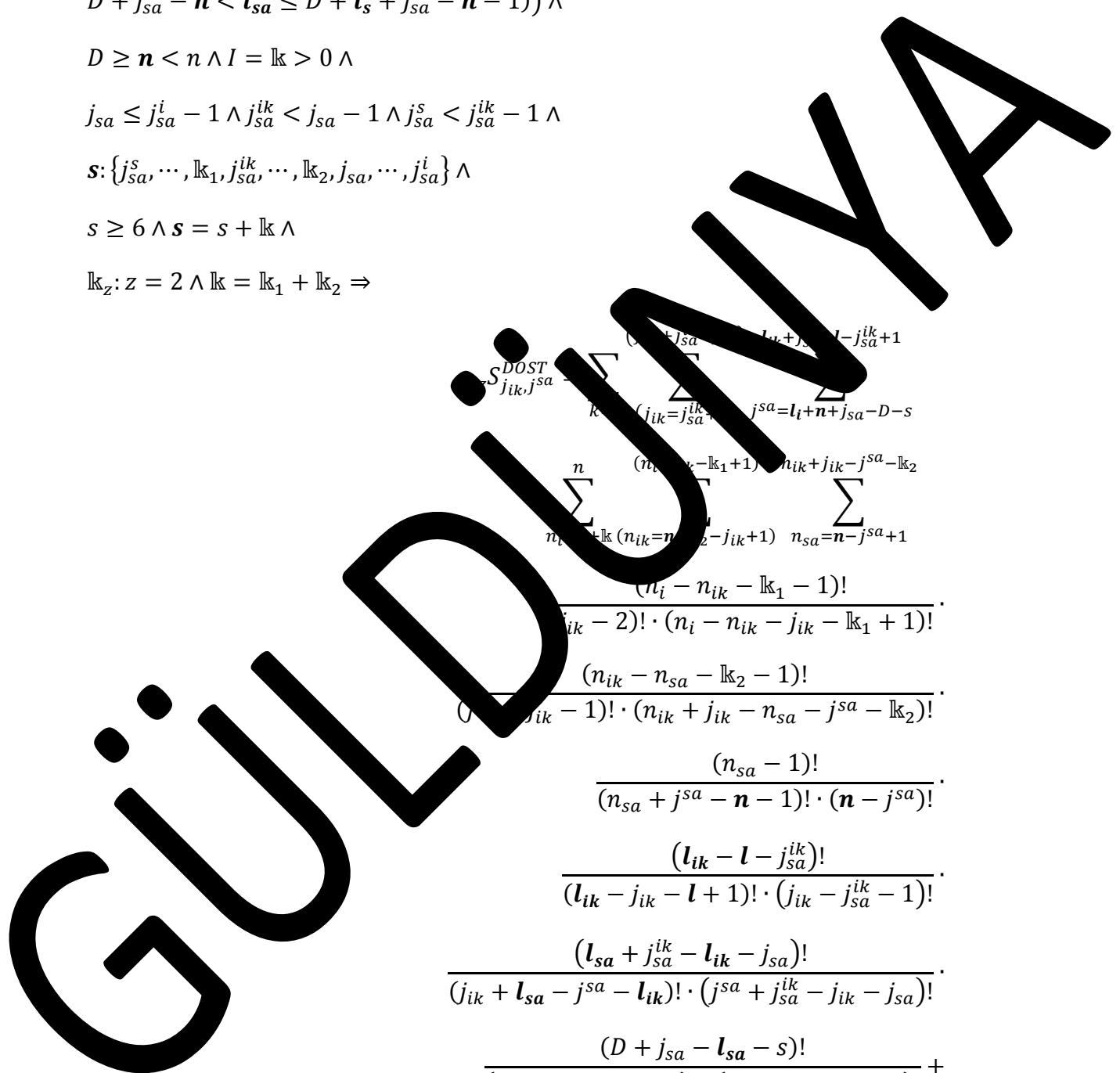
$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=0}^{\lfloor \frac{j_{sa} + l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1}{2} \rfloor} \sum_{\substack{j_{ik}=j_{sa}^{ik} \\ j_{sa}=l_i+n+j_{sa}-D-s}} \frac{\binom{n}{n_{ik}-\mathbb{k}_1+1} \binom{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}}{\binom{n_{ik}+\mathbb{k}}{n_{ik}=n_{sa}-j_{ik}+1} \binom{n_{sa}=n-j_{sa}+1}} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} + \sum_{k=l}^{\lfloor \frac{l_{ik}-l+1}{2} \rfloor} \sum_{\substack{j_{ik}=j_{sa}^{ik}+1 \\ j_{sa}=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2}} \dots$$





$$\begin{aligned}
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
 & \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l - l - j_{sa})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} - l_{sa} - j_{sa}^{sa})!}{(j_{ik} + j_{sa} - j_{sa} - l_{ik})! \cdot (j^{sa} + j_{sa} - j_{sa})!} \cdot \\
 & \frac{(n + j_{sa} - n - s)!}{(n + j_{sa} - n - 1)! \cdot (n - j_{sa} - s)!} \cdot \\
 & \sum_{k=l}^{( )} \sum_{j_{sa}^{ik}=j_{sa}-j_{sa}}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} j^{sa}=l_i+n+j_{sa}-D-s \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik}}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1}^{( )} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}^{( )} \\
 & \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n - s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

$$((D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

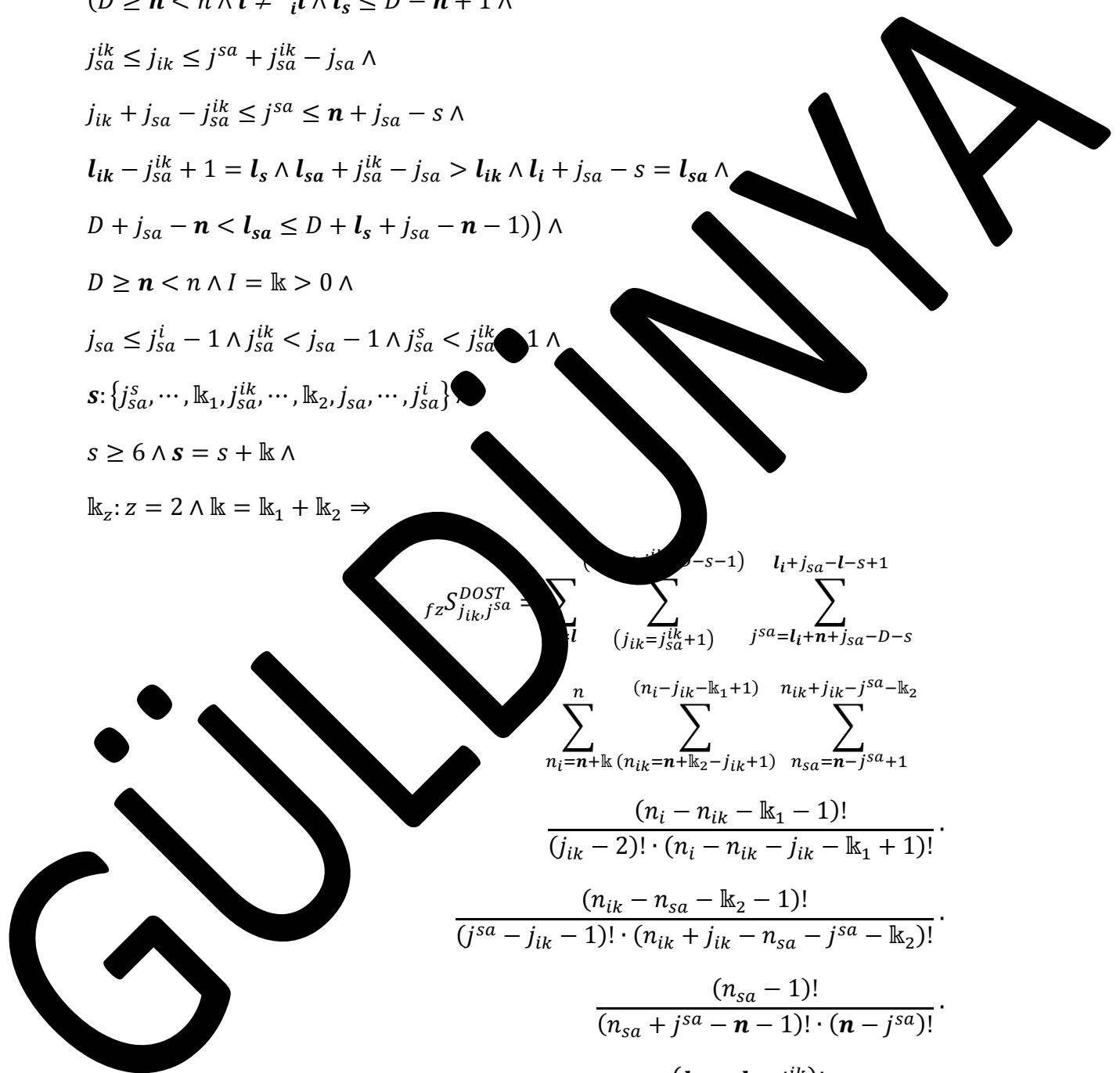
$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\}$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz S_{j_{ik} j_{sa}}^{DOST} = \sum_{l=0}^n \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(l_i+j_{sa}-l-s-1)} \sum_{j_{sa}=l_i+n+j_{sa}-D-s}^{l_i+j_{sa}-l-s+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$



$$\begin{aligned}
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{l_i+j_{sa}-l-s+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}} \\
& \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - l_{k_1} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j^{sa} - l_{k_2})!} \cdot \\
& \frac{(n_{sa} + j_{sa} - n - 1)!}{(j^{sa} - 1)!} \cdot \\
& \frac{(l_{ik} - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik})! \cdot (l_{ik} - j_{sa})!}{(j_{ik} + j_{sa} - j^{sa} - 1)! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} - \\
& \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{l_i+j_{sa}-l-s+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}}^{( )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \\
& \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot l_k)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot l_k)! \cdot (n - s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}
\end{aligned}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$\sum_{j_{ik}, j_{sa}^{ik}} \sum_{i=1}^{(j_{sa}^{ik} - j_{sa})} \sum_{j_{sa}^{ik} = l_i + n + j_{sa} - D - s}^{l_s + j_{sa} - l}$$

$$\sum_{i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-k_2}$$

$$\frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

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$$\begin{aligned}
 & \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_i + j_{sa} - l - s + 1} j^{sa} = l_s + j_{sa} - l + 1 \\
 & \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa}}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \\
 & \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n - n_{sa} - 1)!}{(n_i + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - j_{ik} - 1)!}{(l_i - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - 1)!}{(j_{ik} + j_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{( )} \sum_{(j_{ik} = j_{sa}^{ik} + j_{sa}^{ik} - j_{sa})}^{l_s + j_{sa} - l} j^{sa} = l_i + n + j_{sa} - D - s \\
 & \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)} \\
 & \sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - \mathbb{k}_1}^{( )} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{( )} \\
 & \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n - s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z S_{j_{sa}^{ik}}^{DOST} = \sum_{k=l}^{n+j_{sa}^{ik}-D-s+1} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_i+j_{sa}^{ik}-s+1} \sum_{j=l_i+n+j_{sa}-D-s}^{n_{sa}=n-j_{sa}^{ik}+1} \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(n_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\begin{aligned}
 & \sum_{k=l} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(l_s+j_{sa}^{ik}-l)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{l_i+j_{sa}-l-s+1} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
 & \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_i - j_{ik} - \mathbb{k}_1 - 1)!}{(n_i + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - j_{ik} - 1)!}{(l_i - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - 1)!}{(j_{ik} + j_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(l_s+j_{sa}^{ik}-l)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)} \\
 & \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n - s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

GÜLDÜZ

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

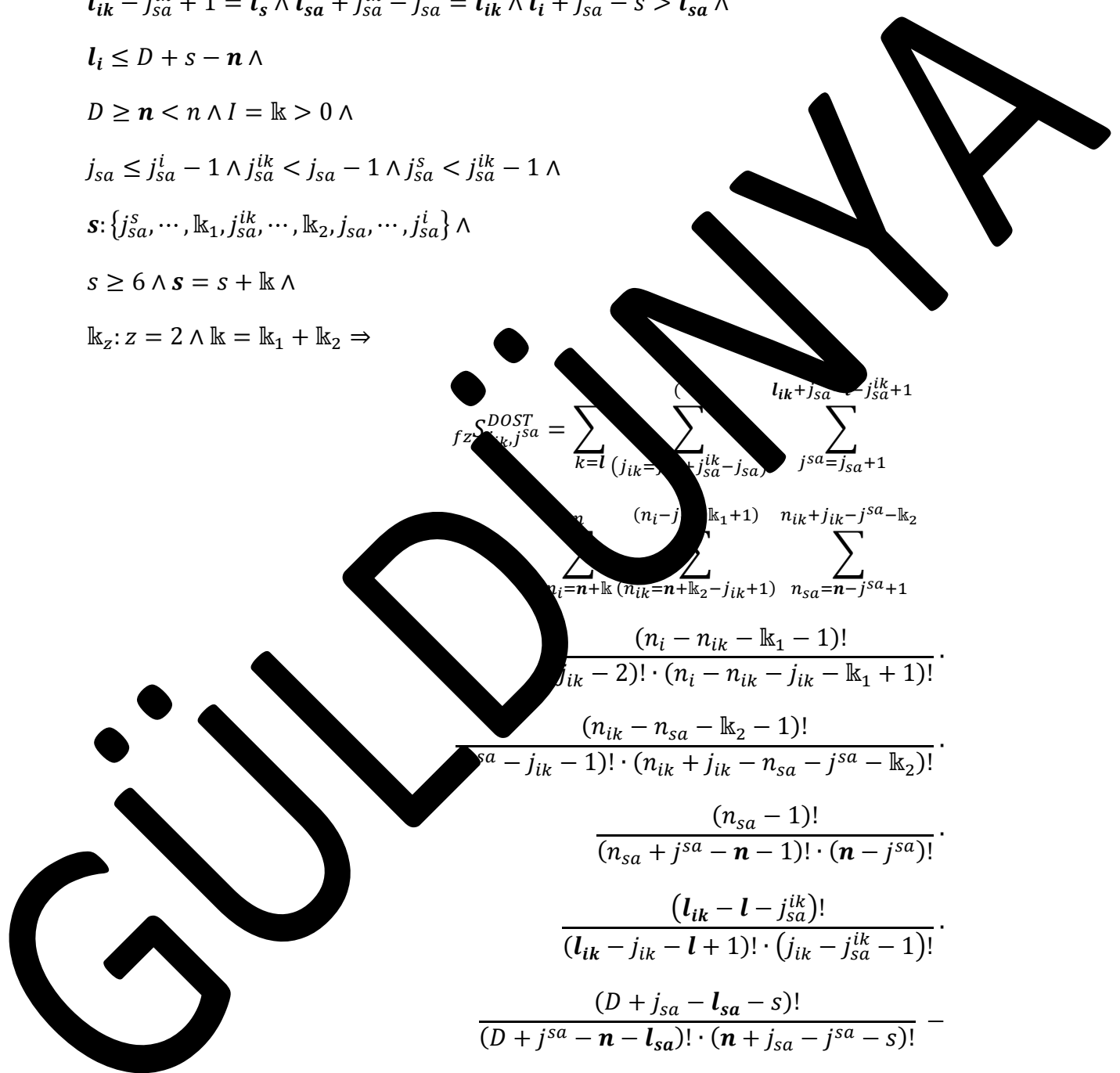
$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz_{\mathbb{k}, j_{sa}}^{DOST} = \sum_{k=l}^{\binom{D+j_{sa}-l-j_{sa}^{ik}+1}{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}} \sum_{j_{sa}^{ik}=j_{sa}+1}^{n_{ik}+j_{sa}-j_{sa}^{ik}+1} \sum_{j_{sa}^s=j_{sa}+1}^{n_{sa}=n-j_{sa}+1} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \sum_{k=l}^{\binom{D+j_{sa}-l-j_{sa}^{ik}+1}{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}} \sum_{j_{sa}^{ik}=j_{sa}+1}^{n_{ik}+j_{sa}-j_{sa}^{ik}+1}$$





$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n-s)!}$$

$$\frac{(l_s - l_i - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - l - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - j_{sa}^{ik} - j_{ik} - l)! \cdot (n - j_{sa}^{ik} - j_{ik} - l - 1)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - l_i \wedge l_i + j_{sa} - s > l_s \wedge$$

$$D + s - n < l_i \leq D + l_{sa} - s - n - j_{sa} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} - j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s = \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, \dots, j_{sa}^i\}$$

$$s \geq \mathbb{k} \wedge s = s + \mathbb{k}$$

$$z: z = z + \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(\quad)} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\quad)} \sum_{j_{sa}=j_{sa}+1}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(\cdot)} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}, n_{sa}=l_i+n+j_{sa}-D)}$$

$$\sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_{is} + j_{ik} + j_{sa} - n_{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n \wedge l \neq i \wedge l \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa}^{ik} \wedge n_{sa} \wedge$$

$$j_{ik} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j^{sa}}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l_{sa}^{ik})!}{(l_{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

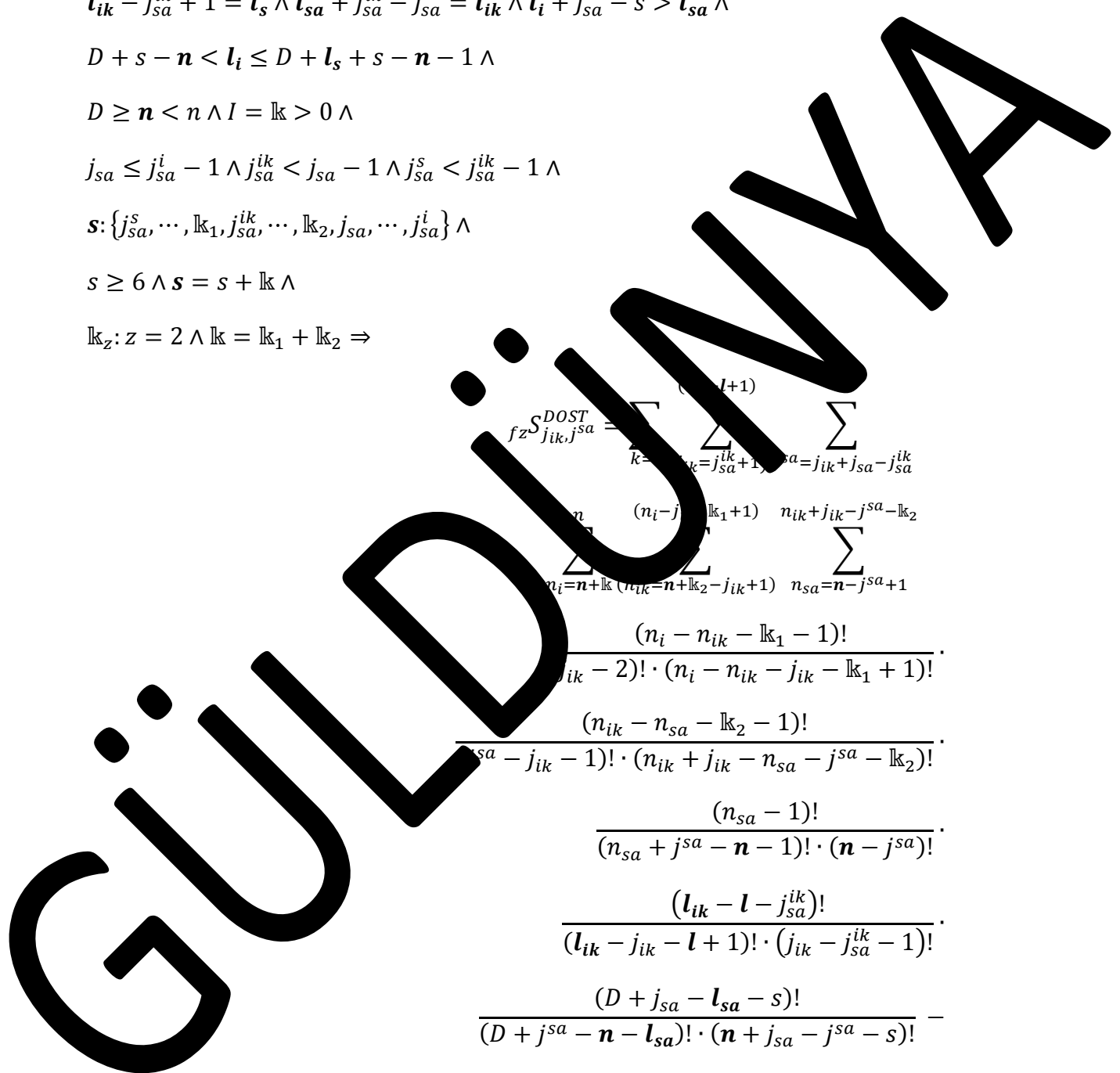
$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$fz_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{ik}-l+1)} \sum_{j_{ik}=j_{sa}^{ik}+1}^{\Delta} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{\Delta} \sum_{n_i=n+k}^{\Delta} \sum_{n_{ik}=n+k_2-j_{ik}+1}^{\Delta} \sum_{n_{sa}=n-j_{sa}+1}^{\Delta} \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{\Delta} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{\Delta}$$



$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n-s)!}$$

$$\frac{(l_s - l_i - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - l - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - j_{sa}^{ik} - j_{ik} - l)! \cdot (n_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - l_i \leq j_{sa} - s > l_i \wedge$$

$$D + s - n < l_i \leq D + l_s - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} - j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s \in \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, \dots, j_{sa}^i\}$$

$$s \geq \mathbb{k} \wedge s = s + \mathbb{k}$$

$$z: z = z + \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{sa}+j_{sa}^{ik}-l-j_{sa}+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-l_{sa})} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}$$

$$\sum_{(n_{is}=n+l_{sa}-j_{sa}^{ik}-j_{sa}^{ik})} \sum_{(n_{sa}=n+l_{sa}-j_{sa}^{ik}-j_{sa}^{ik})}$$

$$\sum_{(n_{is}=n+l_{sa}-j_{sa}^{ik}-j_{sa}^{ik})} \sum_{(n_{sa}=n+l_{sa}-j_{sa}^{ik}-j_{sa}^{ik})}$$

$$\frac{(n_{is} + j_{ik} + j_{sa}^{ik} - n_{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{sa}^{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$(D \geq l_i < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$



$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa} - 1)!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa}^{ik})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - l_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa})!}{(D + j^{sa} - n - l_{sa})! \cdot (n_{sa} + j_{sa}^{ik} - j^{sa} - s)!} \cdot \sum_{k=l}^{n_{ik} + j_{sa}^{ik} - j_{sa}^{ik}} \sum_{j_{sa}^{ik} = j_{sa} + 1}^{n_{ik} + j_{sa}^{ik} - j_{sa}^{ik}} \sum_{j_{sa} = j_{sa} + 1}^{n_{ik} + j_{sa}^{ik} - j_{sa}^{ik}} \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - \mathbb{k}_1} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\quad)}$$

$$\frac{(n_{is} + j_{sa}^s + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$(D > n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$



$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n)) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$j_{sa}^{DOST} = \sum_{k=l}^{(l_{ik}-l+1)} \sum_{j_{sa}^{ik}=j_{sa}+1}^{l_{sa}-l+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{n} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{j_{ik}-\mathbb{k}_1+1} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{sa}^{ik})} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}^{ik})} \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - \mathbb{k}_1)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n_{is} - s)!} \cdot \frac{(l_s - l - \mathbb{k})!}{(l_s + j_{sa}^{ik} - j_{ik})! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - n - 1)!}{(D + j^{sa} + s - n - j_{sa}^{ik})! \cdot (n_{is} + j_{sa} - j^{sa} - s)!}$$

$((D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1) \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa}^{ik} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa}^{ik} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa}^{ik} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$D + s - n - 1 \leq D + l_s + j_{sa} - n - 1) \wedge$

$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa}^{ik} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa}^{ik} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa}^{ik} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$

$D + j_{sa} - n - 1 \leq D + l_s + j_{sa} - n - 1)) \wedge$

$D + s - n - 1 \leq D + l_s + j_{sa} - n - 1 \wedge$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + \mathbb{k} \wedge$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z^{S_{j_{ik}, j^{sa}}}^{DOST} = \sum_{k=l} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(j^{sa}+j_{sa}^{ik}-j_{sa})} l_{ik}+j_{sa}-l-j_{sa}^{ik}+1 \sum_{j^{sa}=l_{sa}+n-D}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2 \sum_{n_{sa}=n-j^{sa}+1}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik})! \cdot (l_{ik} - j_{sa})!}{(l_{sa} - j_{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(l_{ik}-l+1)} \sum_{j^{sa}=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2}^{l_{sa}-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2 \sum_{n_{sa}=n-j^{sa}+1}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{(\quad)} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})}^{(\quad)} \sum_{(j_{sa}=l_i+n+j_{sa}-D-s)}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k)}^{(n_i+l_k+1)} \sum_{(n_{ik}=n+l_k-j_{sa}-l_{k_2})}^{(n_{ik}+1)}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - s - j_{sa}^{ik} - 2 \cdot l_k)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - s - 2 \cdot j_{sa}^{ik} - 2 \cdot l_k)! \cdot (n - s)!}$$

$$\frac{(D - l - 1)!}{(j_{ik} + j_{sa} - l - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j_{sa} + \dots - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$((D \geq n < n \wedge l = l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} - j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_{sa} \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \wedge$$

$$D \geq n < n \wedge l = l > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{sa}+n+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_{sa}-l+1} \sum_{j_{sa}^{sa}+n-D}^{l_{sa}-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j_{sa}}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}$$

$$\frac{(n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)! \cdot (n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j_{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j_{sa}-\mathbb{k}_2)!}$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j_{sa}-n-1)! \cdot (n-j_{sa})!}$$

$$\frac{(l_{ik}-l-j_{sa}^{ik})!}{(l_{ik}-j_{ik}-l+1)! \cdot (j_{ik}-j_{sa}^{ik}-1)!}$$

$$\frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}-j_{sa}-j_{sa}-l_{ik})! \cdot (j_{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}$$

$$\frac{(D+j_{sa}-l_{sa}-s)!}{(D+j_{sa}-n-l_{sa})! \cdot (n+j_{sa}-j_{sa}-s)!} +$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})}^{l_{sa}-l+1} \sum_{j_{sa}^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)! \cdot (n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j_{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j_{sa}-\mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{(j_{sa}^{ik}=j_{sa}-j_{sa}^{ik})} \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})} \sum_{(n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{sa}^{ik})} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k2})} \frac{(n_{is} + j_{ik} + j_{sa}^{ik} - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot l_k)!}{(2 \cdot n_{is} + 2 \cdot j_{sa}^s + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot l_k)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$(D \geq n < n \wedge l \neq l_i) \wedge l_s \leq D - n + 1 \wedge$

$j_{sa}^{ik} \leq j_{sa} \leq j^{sa} \wedge j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_i - j_{sa}^{ik} > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$

$l_i \leq D + s - n) \vee$

$(D \geq n < n \wedge l \neq l_i) \wedge l_s \leq D - n + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$l_{sa} \leq D + j_{sa} - n \wedge l_i \leq D + s - n)) \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(j_{sa} + j_{sa}^{ik} - j_{sa} - l - j_{sa}^{ik} + 1)} \sum_{j_{sa}^{ik} = j_{sa}^{ik} + 1}^{n_{ik} + j_{sa} - l - j_{sa}^{ik} + 1} \sum_{j_{sa} = n_{sa} + 1}^{n_{ik} + j_{sa} - l - j_{sa}^{ik} + 1}$$

$$\sum_{n_i = n + k}^n \sum_{n_{ik} = n_{ik} - k_2 - j_{ik} + 1}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{ik} + j_{ik} - j_{sa} - k_2}$$

$$\frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - n_{ik} - j_{ik} - k_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{sa}^{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} +$$

$$\sum_{k=l}^{(l_{ik} - l + 1)} \sum_{j_{sa}^{ik} = j_{sa}^{ik} + 1}^{l_{sa} - l + 1} \sum_{j_{sa} = l_{ik} + j_{sa} - l - j_{sa}^{ik} + 2}$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l - l - j_{sa})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} - l_{sa} - j_{sa})!}{(j_{ik} + j_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} - j_{sa}^{ik} - j_{sa})!} \cdot \\
 & \frac{(n + j_{sa} - n - s)!}{(n + j_{sa} - n - s)! \cdot (n - j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{( )} \sum_{j^{sa}=j_{sa}+1}^{l_s+j_{sa}-l} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}}^{( )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{( )} \\
 & \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot l_k)!}{(2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot l_k)! \cdot (n - s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

$$D \geq n < n \wedge l \neq j_{sa} \wedge l_{sa} \leq D + j_{sa} - n \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$



$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik} j_{sa}}^{DOST} = \left( \sum_{k=l} \left( \sum_{j_{sa}+j_{sa}^{ik}-j_{sa}} \sum_{j_{sa}=j_{sa}+1}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \right. \right. \\ \left. \left. \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{sa}-j_{sa}-\mathbb{k}_2} \right. \right. \\ \left. \left. \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \right. \\ \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \right) + \\ \left( \sum_{k=l} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(j_{sa}+j_{sa}^{ik}-j_{sa}-1)} \sum_{j_{sa}=j_{sa}+2}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \right. \\ \left. \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \right. \\ \left. \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \right)$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa})!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa})!} +$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{j_{sa}^{ik+2}}^{(l_{sa}-l+1)} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_{sa}-j_{ik}+1)}^{(n_i-j_{ik}-1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1))!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=l} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(j^{sa}=j_{sa}+1)}^{(l_{sa}+j_{sa}-l)}$$

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$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - l - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - j_{sa}^{ik})! \cdot (n_{is} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_{sa} \leq D + j_{sa} - n \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - 1 > l_s \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{ik} < j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\}$$

$$s \geq 6 \wedge s = s - \mathbb{k} \wedge$$

$$\mathbb{k}_z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \left( \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \right)$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\begin{aligned}
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \left( \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_s+l+1} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1)}^{l_s+l+1} \right) \cdot \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_i-j_{ik}+1)}^{(n_i-j_{ik}+1)} \sum_{(n_{sa}=n-j_{sa}+1)}^{n_{ik}+j_{ik}-l_{k2}} \\
 & \frac{(n_{sa} - n_{ik})!}{(j_{ik} - 2)! \cdot (n_{sa} - n_{ik} - j_{ik} - l_{k1} + 1)!} \cdot \\
 & \frac{(n_{ik} - l_{sa} - l_{k2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - l_{k2})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{(l_s+j_{sa}^{ik}-l)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k1}} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k2})}^{( )}
 \end{aligned}$$

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$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$l_{sa} \leq D + j_{sa} - n \wedge l_i \leq D + s - n) \wedge$$

$$D \geq n < n \wedge I = 1 \wedge s = 0 \wedge$$

$$j_{sa}^{ik} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{ \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^s, \dots, j \} \wedge$$

$$j_{sa}^{ik} \geq 6 \wedge j_{sa}^s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k}_1 = \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_{sa}-l+1} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa})!}{(D + j^{sa} - n - l_{sa})! \cdot (D + j_{sa} - j^{sa})!}$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{j=j_{sa}^{ik} + 1}^{n - j_{sa}^{ik}}$$

$$\sum_{i=n+\mathbb{k}}^{n} \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{i=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1}^{(\cdot)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(2 \cdot n_{is} + j_{sa}^s + j_{sa}^{ik} - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D - n - l_i \neq l_i \wedge l_s \leq D - n + 1 \wedge$$

$$2 \leq l \leq D - l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa} - j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \left( \sum_{k=l} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik})} \sum_{(j_{sa}=l_{sa}+n-D)} \frac{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}{(j_{ik}-2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \right. \\ \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-\mathbb{k}_2} \\ \frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j_{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j_{sa}-\mathbb{k}_2)!} \cdot \frac{(n_{sa}-1)!}{(j_{sa}-n-1)! \cdot (n-j_{sa})!} \\ \left. \frac{(l_{ik}-l-j_{sa}^{ik})!}{(l_{ik}-j_{ik}-l+1)! \cdot (j_{ik}-j_{sa}^{ik}-1)!} \right) + \\ \frac{(D+j_{sa}-l_{sa}-s)!}{(D+j_{sa}-n-l_{sa})! \cdot (n+j_{sa}-j_{sa}-s)!} \\ \left( \sum_{k=l} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(j_{sa}+j_{sa}^{ik}-j_{sa}-1)} \sum_{(j_{sa}=l_{sa}+n-D)}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \right. \\ \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \\ \left. \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \right. \\ \left. \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \right)$$

$$\begin{aligned}
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(l_{ik}-l+1)} \sum_{(j_{ik}+j_{sa}-l-j_{sa}^{ik})}^{(l_{ik}-l+1)} \cdot \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}+j_{ik}+1)}^{(n_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}-j^{sa}-\mathbb{k}_2)} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_{ik} - n_{sa} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) - \\
 & \sum_{k=l}^{( )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{( )} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_s+j_{sa}-l} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}
 \end{aligned}$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - l)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

$$2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge s < j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\}$$

$$s \cdot 6 \wedge s = s \cdot \mathbb{k} \wedge$$

$$\mathbb{k}_2 = 2 \wedge \mathbb{k} = \mathbb{k}_1 \wedge \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \left( \sum_{k=l} \sum_{(l_{ik}=l+1)} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \sum_{n_{i}=n+\mathbb{k}} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)} \sum_{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1} \sum_{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \right)$$

$$\begin{aligned}
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \left( \sum_{k=l}^{(l_{sa} + n + j_{sa}^{ik} - D - j_{sa} - 1)} \sum_{(j_{ik} = j_{sa}^{ik} + j^{sa} = j_{sa}^{ik} + n - D)}^{l_{sa} - l + 1} \right) \cdot \\
 & \sum_{n_i = n + k_1}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - k_2} \\
 & \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{k=l}^{(l_{ik} - l + 1)} \sum_{(j_{ik} = l_{sa} + n + j_{sa}^{ik} - D - j_{sa})}^{l_{sa} - l + 1} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik} + 1} \\
 & \sum_{n_i = n + k_1}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - k_2} \\
 & \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot
 \end{aligned}$$

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$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (D + j_{sa} - j^{sa} - 1)!}$$

$$\sum_{i=0}^{n - (j_{sa}^{ik} - l)}$$

$$\sum_{k=0}^{n} \sum_{l=0}^{(n_i - j_s + 1)}$$

$$\sum_{l=0}^{(n_{is} = n + \mathbb{k} + j_{sa}^{ik} - j_{ik})}$$

$$\frac{(2 \cdot n_{is} + j_{sa}^s + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D - n - l_i \neq l_i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1 \wedge$$

$$D \geq n < n \wedge l_i = \mathbb{k} > 0 \wedge$$

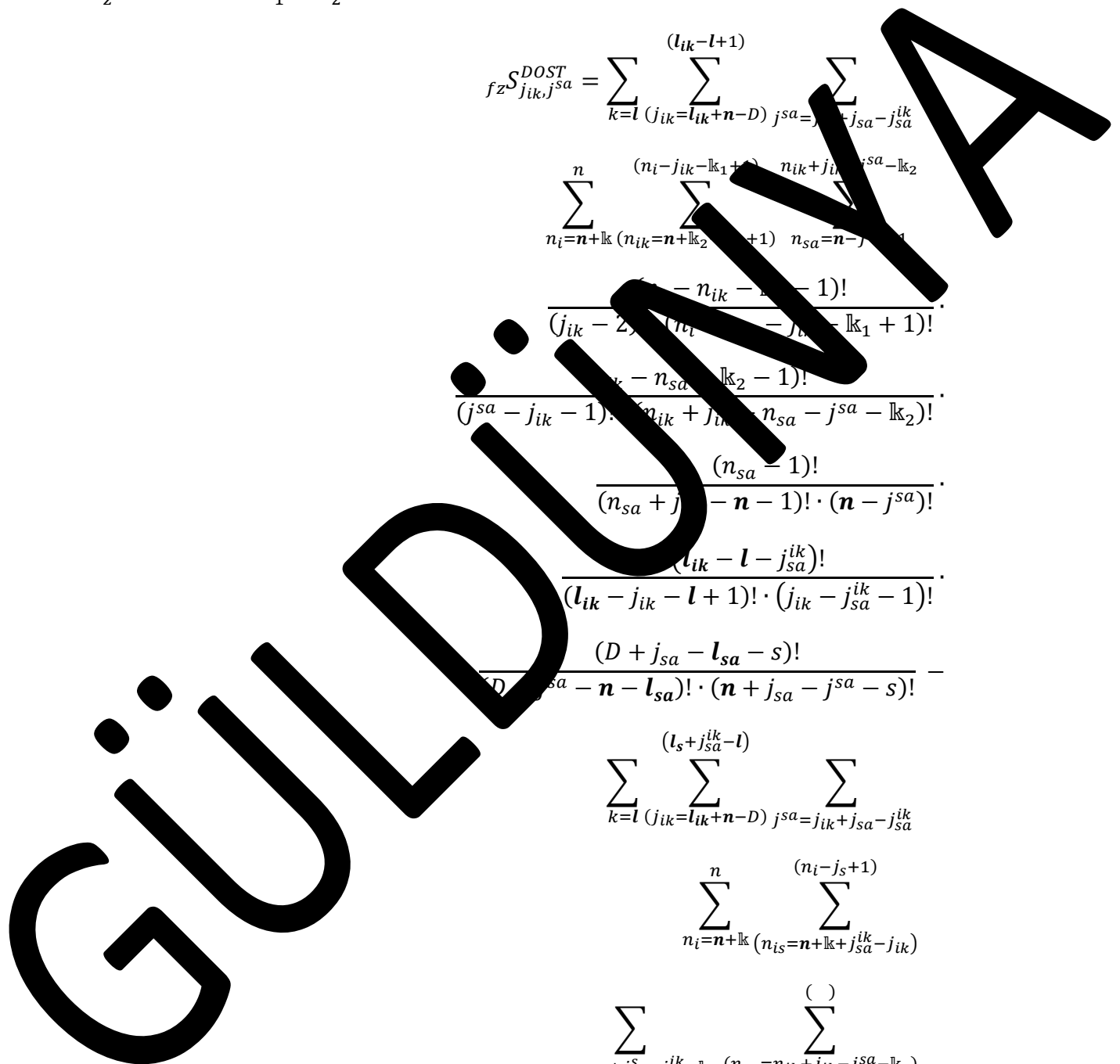
$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik} j_{sa}}^{DOST} = \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_{ik}+n-D)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{(n_{sa}=n-j_{sa}+1)}^{(n_{ik}+j_{ik}+j_{sa}-\mathbb{k}_2)} \frac{(n_{sa}-n_{ik}-j_{sa}-1)!}{(j_{ik}-2)!(n_{sa}-j_{sa}-\mathbb{k}_1+1)!} \cdot \frac{(n_{sa}-n_{ik}-\mathbb{k}_2-1)!}{(j_{sa}-j_{ik}-1)!(n_{ik}+j_{ik}+n_{sa}-j_{sa}-\mathbb{k}_2)!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j_{sa}-n-1)! \cdot (n-j_{sa})!} \cdot \frac{(l_{ik}-l-j_{sa}^{ik})!}{(l_{ik}-j_{ik}-l+1)! \cdot (j_{ik}-j_{sa}^{ik}-1)!} \cdot \frac{(D+j_{sa}-l_{sa}-s)!}{(D+j_{sa}-n-l_{sa})! \cdot (n+j_{sa}-j_{sa}-s)!} \sum_{k=l}^{(l_s+j_{sa}^{ik}-l)} \sum_{(j_{ik}=l_{ik}+n-D)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-\mathbb{k}_2)}^{(\quad)} \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n-s)!}$$



$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{i=l}^{n} \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{n_i-j_{ik}-\mathbb{k}_1+1} \sum_{j_{sa}^{ik}=l_i+n+j_{sa}-D-s}^{l_i+j_{sa}-l-s+1} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l} \sum_{\binom{()}{j_{ik}=j^{sa}+j_{sa}^{lk}-j_{sa}}} \sum_{l_s+j_{sa}-l}^{j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{lk}}$$

$$\sum_{n_i=n+l_k}^n \sum_{\binom{()}{n_{is}=n+l_k+j_{sa}^{lk}-j_{sa}^{ik}}}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}} \sum_{\binom{()}{n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}^{lk_2}}}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{lk_1} - l_{k_2})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{lk_1} - 2 \cdot l_{k_2})! \cdot (n_{is} - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{lk_1} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - 1)!}{(D + j^{sa} + s - n - j_{sa}^{lk_1} - j_{sa}^{lk_2} - j_{sa}^{lk_1} - j_{sa}^{lk_2} - j_{sa}^{lk_1} - j_{sa}^{lk_2} - j_{sa}^{lk_1} - j_{sa}^{lk_2})! \cdot (n_{is} + j_{sa} - j^{sa} - s)!}$$

$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_{sa} - j_{sa} - s = l_{sa} \wedge$

$D + j_{sa} - n \leq l_{sa} \leq n + l_s + j_{sa} - n \wedge$

$D \geq n < n \wedge l_{k_1} > 0 \wedge$

$j_{sa} \leq l_{k_1} - 1 \wedge j_{sa}^{ik} < l_{k_1} - 1 \wedge j_{sa} < j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \dots, l_{k_1}, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 1, s = s + 1 \wedge$

$l_{k_z}: z = 2, \dots, k = l_{k_1} + l_{k_2} \Rightarrow$

$$fz_{j_{ik}j_{sa}}^{DOST} = \sum_{k=l} \sum_{\binom{()}{l_i+j_{sa}^{ik}-l-s+1}} \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+l_k}^n \sum_{\binom{()}{n_{ik}=n+l_{k_2}-j_{ik}+1}} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa} - 1)!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa})!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{\Delta} \sum_{i=0}^{\Delta} \sum_{j=0}^{\Delta} \sum_{l_{ik}+n-l_{sa}-j_{sa}^{ik}}^{\Delta} \sum_{n_{is}=n+k}^{(n_i-j_s+1)} \sum_{(n_{is}=n+k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \sum_{k=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1}^{( )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{( )} \frac{(2 \cdot n_{is} + j_{sa}^s + j_{sa}^s - l_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D > n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq n + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z^{DOST} S_{j_{ik}, j_{sa}} = \sum_{k=l}^{(j_{sa} + j_{sa}^{ik} - j_{sa})} \sum_{(j_{ik} = l_{ik} + n - D)}^{l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1} \sum_{j_{sa} = l_i + \dots}^{j_{sa} - D - s} \dots$$

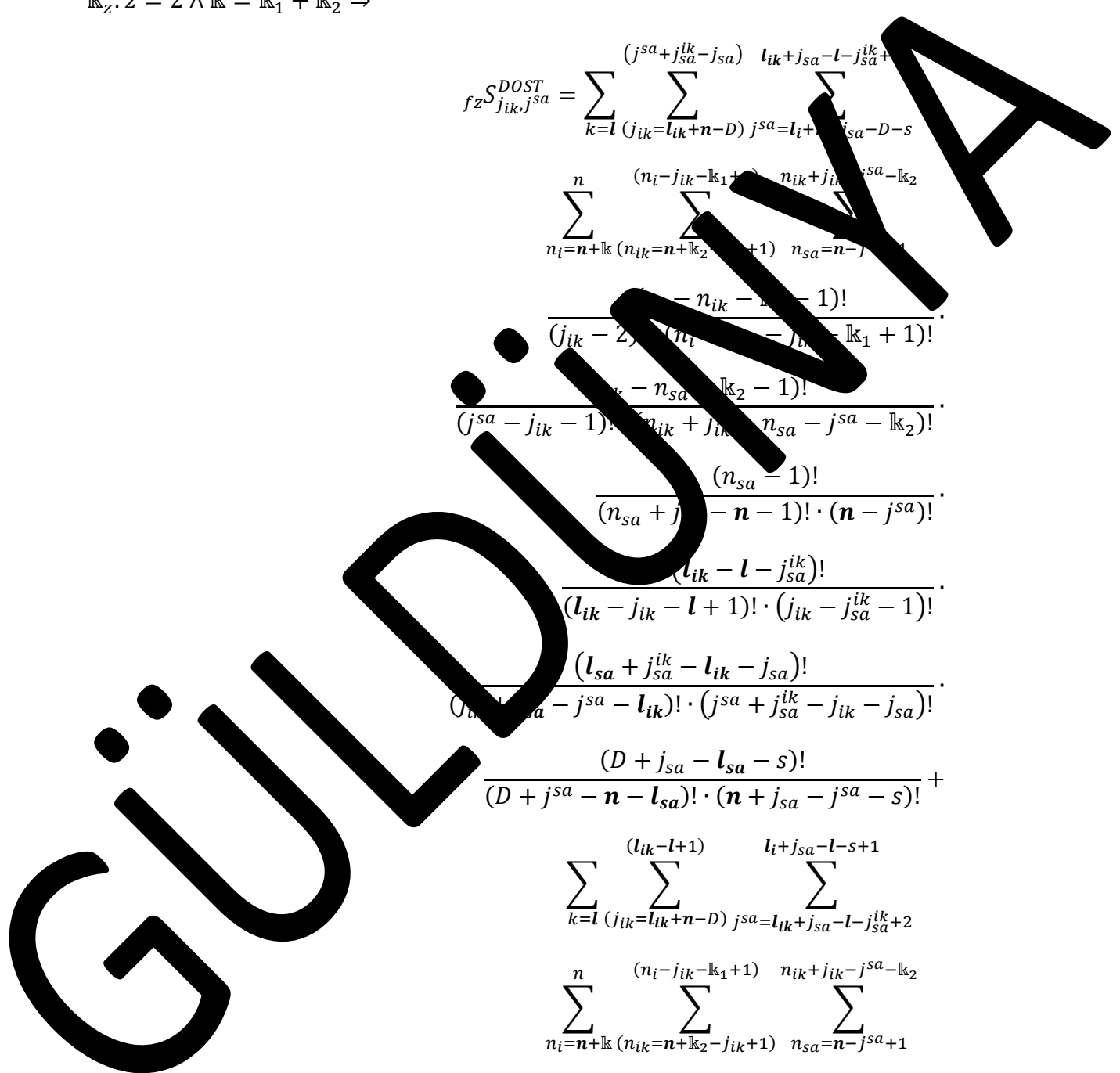
$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2} \dots$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} +$$

$$\sum_{k=l}^{(l_{ik} - l + 1)} \sum_{(j_{ik} = l_{ik} + n - D)}^{l_i + j_{sa} - l - s + 1} \sum_{j_{sa} = l_{ik} + j_{sa} - l - j_{sa}^{ik} + 2} \dots$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2} \dots$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!}$$





$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{\binom{l_{sa} + l - l_{sa} - l}{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}}} \sum_{\substack{j_{sa} = l_{sa} + n_{sa} - j_{sa} - j_{sa}^{ik} - j_{sa} \\ n_{is} = n + \mathbb{k} + j_{sa}^{ik} - j_{ik}}} \sum_{\substack{n_{is} + j_{sa}^s - j_{sa}^{ik} - \mathbb{k}_1 \\ n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}} \frac{(n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{sa}^s + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

- $D \geq n < n \wedge l \neq i \wedge l \leq D - n + 1 \wedge$
- $j_{sa}^{ik} \leq j_{ik} \leq j_{sa}^{ik} - j_{sa} \wedge$
- $j_{ik} + j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$
- $l_{ik} - j_{sa}^{ik} > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$
- $D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$
- $D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$
- $j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$
- $s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_z S_{j_{ik} j^{sa}}^{DOST} = \sum_{k=l}^{(l_i+n+j_{sa}^{ik}-D-s-1)} \sum_{(j_{ik}=l_{ik}+n-D)}^{l_i+j_{sa}-l-s+1} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l_{sa}^{ik})!}{(l_{ik} - j_{ik} - l_{sa}^{ik} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{ik} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

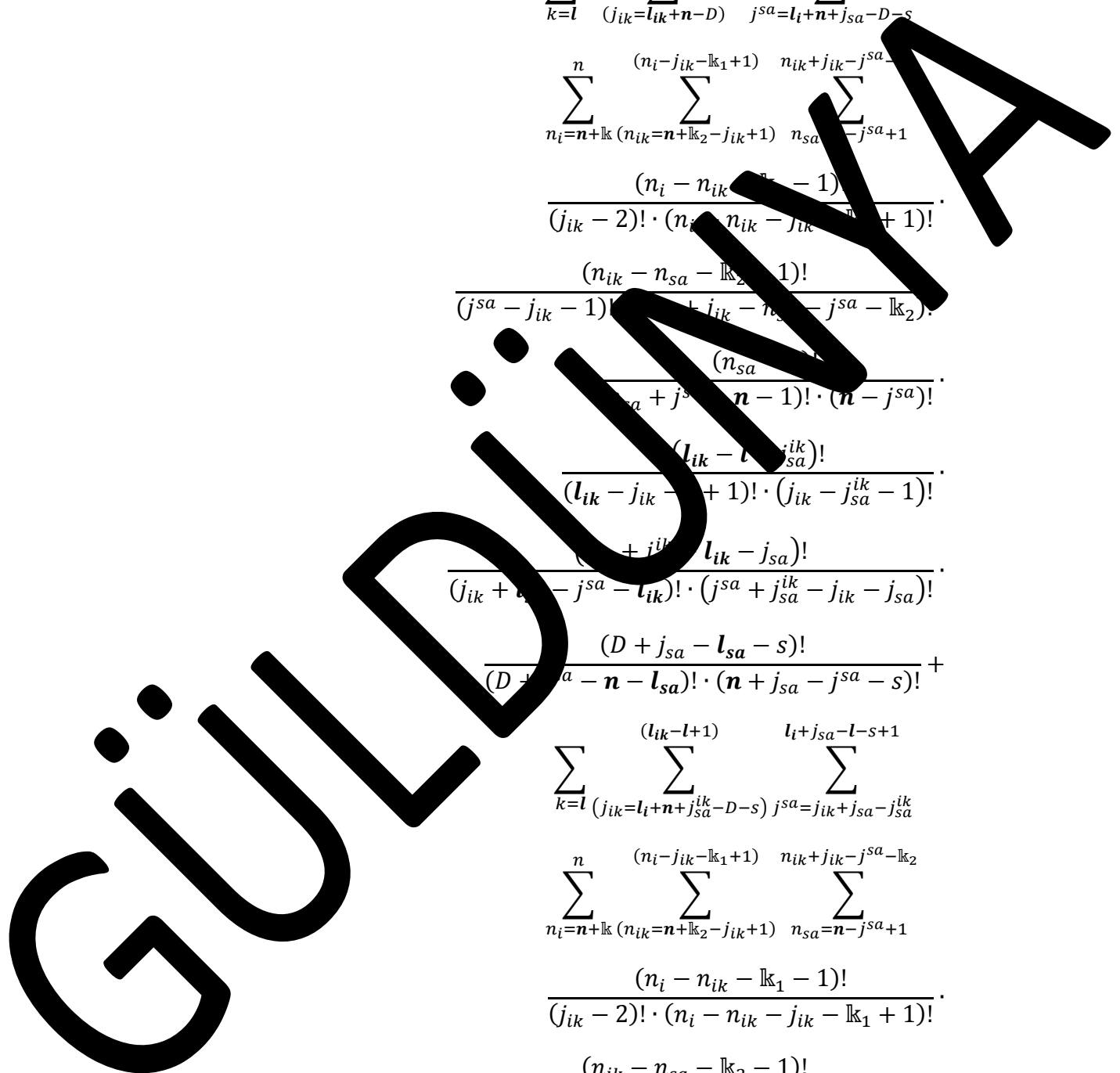
$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{l_i+j_{sa}-l-s+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$



$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \sum_{k=l}^{\sum_{j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa}^{ik}} (l_s + j_{sa}^{ik} - l)} \sum_{j_{sa}^{ik}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{\sum_{j_{sa}^{ik}=j_{ik}+j_{sa}-j_{sa}^{ik}} (n_i - j_s)} \sum_{n+l_k}^{\sum_{n+l_k} (n_{is} + l_k + j_{sa}^{ik} - j_{ik})} \sum_{n_{ik}=n_{is}+j_{sa}^{ik}-l_{k_1}}^{\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-l_{k_1}} (n_{ik} + j_{ik} - j^{sa} - l_{k_2})} \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^{ik} - n_{sa} - j^{sa} - j_{sa}^{ik} - 2 \cdot l_k)!}{(2 \cdot n_{is} + 2 \cdot j_{sa}^{ik} - n_{sa} - j^{sa} - n - j_{sa}^{ik} - 2 \cdot l_k)! \cdot (n - s)!} \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \frac{(D - l_i)!}{(D + j^{sa} - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge l_i \leq D + s - n) \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^l\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

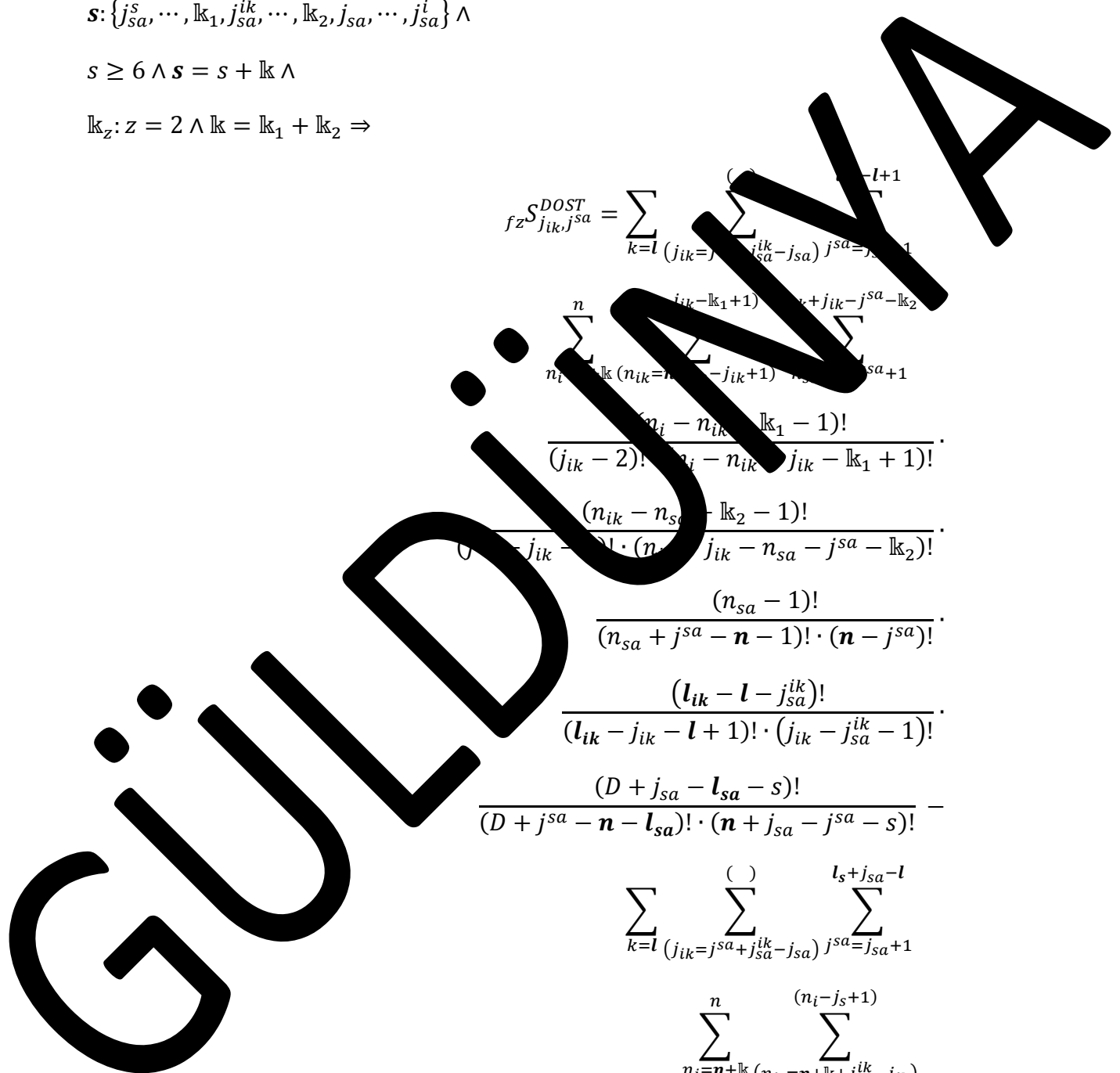
$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_{zj_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(j_{ik} - j_{sa}^{ik} - j_{sa})} \sum_{j_{sa} = j_{sa} + 1}^{(j_{sa} - j_{sa}^{ik} - j_{sa})} \sum_{n_i = n + k}^{(n_{ik} - n_{sa} - j_{ik} + 1)} \sum_{n_{sa} = n_{sa} + 1}^{(n_{ik} - n_{sa} - j_{ik} + 1)} \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{ik} - 1)! \cdot (n_{sa} - j_{sa} - j_{sa} - k_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{(j_{ik} - j_{sa}^{ik} - j_{sa})} \sum_{j_{sa} = j_{sa} + 1}^{(j_{sa} - j_{sa}^{ik} - j_{sa})} \sum_{n_i = n + k}^{(n_{ik} - n_{sa} - j_{ik} + 1)} \sum_{n_{sa} = n_{sa} + 1}^{(n_{ik} - n_{sa} - j_{ik} + 1)}$$

$$\sum_{n_i = n + k}^{(n_{ik} - n_{sa} - j_{ik} + 1)} \sum_{n_{sa} = n_{sa} + 1}^{(n_{ik} - n_{sa} - j_{ik} + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - k_1}^{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - k_2)}$$



$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - \mathbf{n} - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (\mathbf{n} - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - \mathbf{n} - l_i - j_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa})!}$$

$$D \geq \mathbf{n} < \mathbf{n} \wedge l \neq i \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - \mathbf{n} < l_i \leq D + l_{sa} + s - \mathbf{n} - j_{sa}$$

$$D \geq \mathbf{n} < \mathbf{n} \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$j_{ik}, j_{sa}^{OST} = \sum_{k=l}^{n} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{l_{sa}-l+1} \sum_{j_{sa}^{sa}=j_{sa}+1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\mathbf{n}-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l} \sum_{\binom{()}{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}} \sum_{l_s+j_{sa}-l}^{l_s+j_{sa}-l} j^{sa=l_i+n+j_{sa}-D-s}$$

$$\sum_{n_i=n+l_k}^n \sum_{\binom{()}{n_i=n+l_k}} \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} (n_i=n+l_k+j_{sa}^{ik}-j_{ik})$$

$$\sum_{n_{ik}=n_i+j_{sa}^s-j_{sa}^{ik}-l_{sa}^{ik}} \sum_{\binom{()}{n_{sa}=n_{ik}+j_{ik}-l_{ik_2}}} (n_{ik}=n_i+j_{sa}^s-j_{sa}^{ik}-l_{sa}^{ik}-l_{sa}^{ik_2})$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - l_{sa}^{ik_2})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - l_{sa}^{ik_2} - 2 \cdot l_{sa}^{ik_2})! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa} - j_{ik} - 1) \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l)!}{(n + j^{sa} + j_{sa} - n - l_i - j_{sa} - s)! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l \neq l \wedge l \leq D - n + 1) \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa}^{ik} - j_{sa} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{ik} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq l \wedge l \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa}^{ik} - j_{sa} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \wedge$$

$$D \geq n < n \wedge l = l > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{sa} + j_{sa}^{ik} - l - j_{sa} + 1)} \sum_{(j_{ik} = l_{sa} + n + j_{sa}^{ik} - D - j_{sa})} j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik} \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + j_{sa}^{ik} - j_{sa} - \mathbb{k}_2)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{(n_{is} = n + \mathbb{k} + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - j_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - \mathbb{k}_2)!} \cdot \frac{(n - 1)!}{(n_{sa} - j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(n - l - j_{sa}^{ik})!}{(n_{sa} - j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{sa} - i - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}{(D + j_{sa} - l_{sa} - s)! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)} j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik} \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - \mathbb{k}_1} \sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)}^{(\quad)}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D + s - n < l_i \leq D + l_{sa} + s - n - j_{sa}) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_i \wedge l_i + j_{sa} - n - j_{sa}^{ik} = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = k_1 + k_2 \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 =$$

$$fz S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(j^{sa} + j_{sa}^{ik} - j_{sa})} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_s + j_{sa} - l} \sum_{j_{sa} = l_{sa} + n - D}^{n} \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - k_2} \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!}$$



$$\begin{aligned}
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{j_{ik}=j_{sa}^{ik}}^{(j_{ik} - j_{sa}^{ik} - 1)} \sum_{j_{sa}=l_s + j_{sa} - l + 1}^{(j_{sa} - j_{sa}^{ik} - 1)} \sum_{n_i=n+l_k}^{(n - j_{ik} - l + 1)} \sum_{n_{ik}=n+l_k+j_{ik}+1}^{(n_{ik} - j_{ik} - j^{sa} - l_{k_2})} \sum_{n_{sa}=n-j^{sa}+1}^{(n_{sa} - j_{sa} - l_{k_1} + 1)} \\
 & \frac{(n_{ik} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{ik} - l_{k_2} - 1)!}{(j^{sa} - j_{sa}^{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{( )} \sum_{j_{ik}=j_{sa}^{ik} + j_{sa}^{ik} - j_{sa}}^{( )} \sum_{j^{sa}=l_i + n + j_{sa} - D - s}^{l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1} \\
 & \sum_{n_i=n+l_k}^{n} \sum_{n_{is}=n+l_k+j_{sa}^{ik}-j_{ik}}^{(n_i - j_s + 1)}
 \end{aligned}$$

GÜLDÜZMAYA

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{\binom{()}{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$

$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$

$D + s - n < l_i \leq D + l_{sa} + s - n - j_{sa}^{ik} \vee$

$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$

$(n \geq n < n \wedge I = \mathbb{k} > 0)$

$j_{sa} \leq j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$\geq 6 \wedge s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(l_{sa}+n+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{j_{sa}=l_{sa}+n-D}^{l_{sa}-l+1}$$

$$\begin{aligned}
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{\substack{(n_i-j_{ik}-\mathbb{k}_1+1) \\ (n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}} \sum_{\substack{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2 \\ n_{sa}=n-j^{sa}+1}} \\
 & \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{l=1}^{(l_s + j_{sa}^{ik})} \sum_{\substack{j_{sa}^{ik} - D - j_{sa} \\ j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}} \sum_{l_{sa} - l + 1} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{\substack{(n_i-j_{ik}-\mathbb{k}_1+1) \\ (n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}} \sum_{\substack{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2 \\ n_{sa}=n-j^{sa}+1}} \\
 & \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$



$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_{z \neq j_{sa}}^{OST} = \sum_{k=l}^{n+1} \sum_{(j_{ik} = n-D)}^{j_{sa} + j_{sa}^{ik} - j_{sa} - k + j_{sa} - l - j_{sa}^{ik} + 1} \sum_{j^{sa} = l_{sa} + n - D}^{n} \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{j_{ik} - k_1 + 1} \sum_{(n_{sa} = n - j^{sa} + 1)}^{n_{ik} + j_{ik} - j^{sa} - k_2} \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\begin{aligned}
 & \sum_{k=l} \sum_{(j_{ik}=l_{ik}+n-D)}^{(l_{ik}-l+1)} \sum_{(j_{sa}=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2)}^{l_{sa}-l+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{(n_{sa}=n-j_{sa}+j_{sa}^{ik}-j_{ik})}^{n_{ik}+j_{ik}-j_{sa}^{ik}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j_{sa}^{ik} - l_{k_2})!} \cdot \\
 & \frac{(n_i - j_{ik} - l_{k_1} - 1)!}{(n_i + j_{sa} - n - 1)! \cdot (n - j_{sa}^{ik})!} \cdot \\
 & \frac{(l_{ik} - j_{sa}^{ik} - 1)!}{(n_i - j_{ik} - l_{k_1} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + j_{sa}^{ik} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa}^{ik} - l_{sa} - s)!}{(D + j_{sa}^{ik} - j_{sa}^{ik} - l_{sa})! \cdot (n + j_{sa} - j_{sa}^{ik} - s)!} \\
 & \sum_{k=l} \sum_{(j_{ik}=j_{sa}^{ik}+j_{sa}^{ik}-j_{sa})}^{( )} \sum_{(j_{sa}^{ik}=l_i+n+j_{sa}-D-s)}^{l_s+j_{sa}-l} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-l_{k_2})}^{( )} \\
 & \frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j_{sa}^{ik} - s - j_{sa}^{ik} - 2 \cdot l_k)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j_{sa}^{ik} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot l_k)! \cdot (n - s)!} \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \\
 & \frac{(D - l_i)!}{(D + j_{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa}^{ik} - s)!}
 \end{aligned}$$

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$$\left( (D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \wedge$$

$$D + s - n < l_i \leq D + l_{sa} + s - n - j_{sa}) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^i \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
 f_z S_{j_{ik}, j^{sa}}^{DOST} = & \sum_{k=l}^{(l_{sa}+n+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{(j_{ik}=l_{ik}+n-D)}^{l_{sa}-l+1} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-l+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}{(j_{ik} + j_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - l_{sa} - s)! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})}^{(l_{ik}-l+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{l_{sa}-l+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
 \end{aligned}$$

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$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)} j_{sa} = j_{sa} + j_{sa} - j_{sa}^{ik}$$

$$\sum_{n=n+k}^n \sum_{(n_{is} = n - j_{ik})}^{(n_{is} + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^{ik} - k_1}^{( )} \sum_{(n_{ik} = j_{sa} - k_2)}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - s - j_{sa}^{ik} - 2 \cdot k)!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j_{sa} - s - 2 \cdot j_{sa}^{ik} - 2 \cdot k)! \cdot (n - s)!} \cdot \frac{(n - l - 1)!}{(n + j_{sa} - j_{sa}^{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j_{sa} + n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

- $((D \geq n < n \wedge l = l \wedge l_s \leq D - n + 1 \wedge$
- $j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$
- $j_{ik} - j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - s \wedge$
- $l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$
- $D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1) \vee$
- $(D \geq n < n \wedge l \neq l_i \wedge l_s \leq D - n + 1 \wedge$
- $j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$
- $j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - s \wedge$
- $l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$
- $D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1 \wedge$
- $D + s - n < l_i \leq D + l_{sa} + s - n - j_{sa}) \vee$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

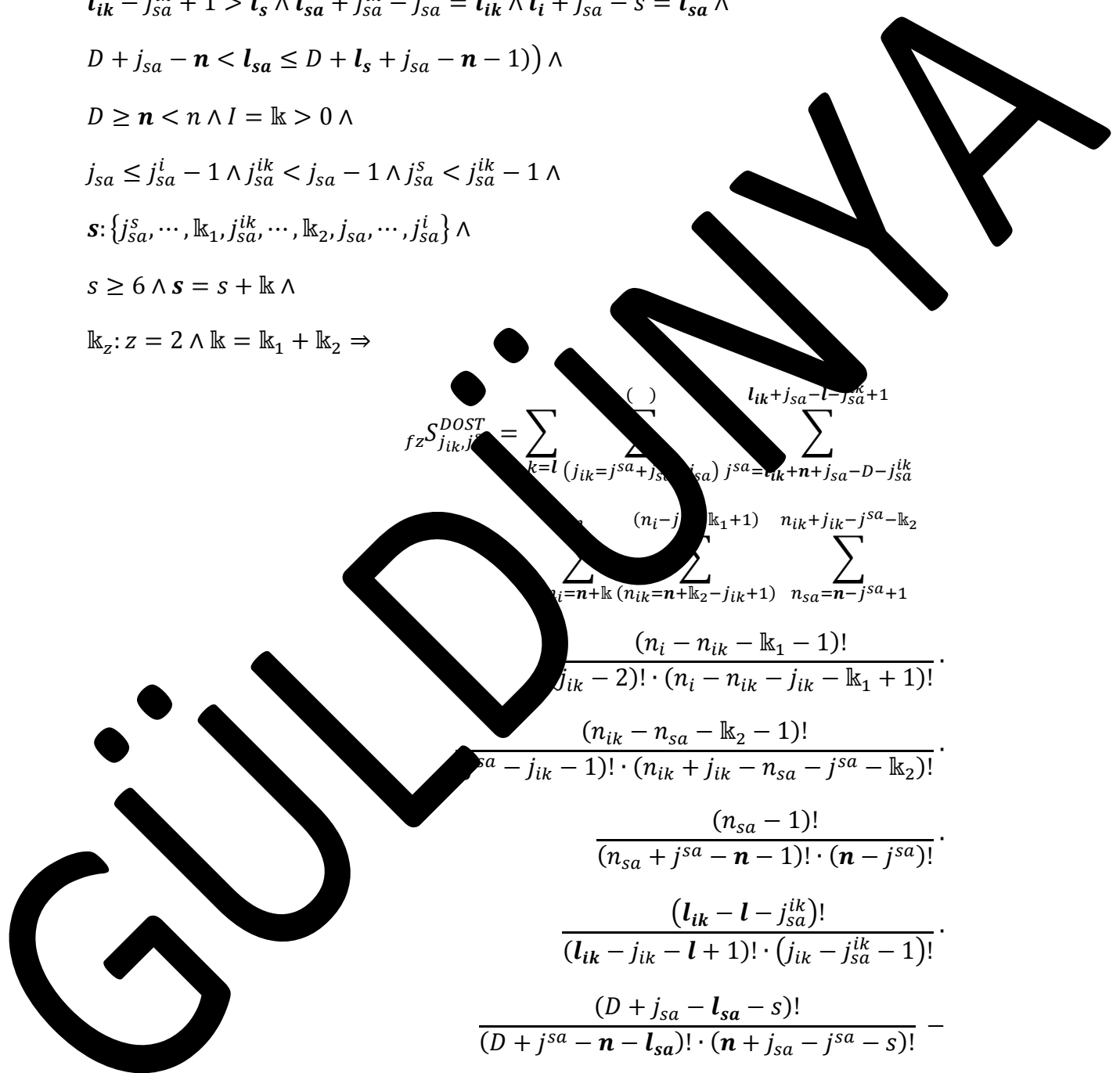
$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(\quad)} \sum_{\substack{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa} \\ j_{sa}^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}} \sum_{\substack{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1 \\ (n_i-j_{sa}^{ik}+\mathbb{k}_1+1) \\ n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2 \\ n_i=n+\mathbb{k} \\ (n_{ik}=n+\mathbb{k}_2-j_{ik}+1) \\ n_{sa}=n-j^{sa}+1}} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \sum_{k=l}^{(\quad)} \sum_{\substack{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa} \\ j_{sa}^{sa}=l_i+n+j_{sa}-D-s}} \sum_{\substack{l_s+j_{sa}-l \\ (n_i-j_{sa}^{ik}+\mathbb{k}_1+1) \\ n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2 \\ n_i=n+\mathbb{k} \\ (n_{ik}=n+\mathbb{k}_2-j_{ik}+1) \\ n_{sa}=n-j^{sa}+1}}$$



$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(2 \cdot n_{is} + j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - s - j_{sa}^{ik} - 2 \cdot \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_{ik} + j_{sa}^s - n_{sa} - j^{sa} - n - 2 \cdot j_{sa}^{ik} - 2 \cdot \mathbb{k})! \cdot (n-s)!}$$

$$\frac{(l_s - l_i - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - l - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - j_{sa}^{ik} - j_{ik} - l)! \cdot (n_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l = i \wedge l_{sa} \leq D + j_{sa} - n$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{ik} < j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\}$$

$$s \geq 6 \wedge s = s - \mathbb{k} \wedge$$

$$\mathbb{k}_z = 2 \wedge \mathbb{k} = \mathbb{k}_1 \wedge \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j^{sa}}^{DOST} = \left( \sum_{k=i}^l \sum_{(j_{ik}=j_{sa}^{ik})}^{( )} \sum_{j^{sa}=j_{sa}} \right)$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!} \Bigg) +$$

$$\left( \sum_{k=i}^l \sum_{j_{ik}=j_{sa}^{ik}}^{( )} \sum_{j^{sa}=j_{sa}^{i,l+1}}^{l_{sa}-i,l+1} \right)$$

$$\sum_{n_i=n+l_k}^n \sum_{n_{ik}=n+l_k-j_{ik}+1}^{(n_i-j_{ik}-l_{k_1}+1) \quad n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2}+1}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})}$$

$$\frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - (n_i - n_{ik} - l_{k_1} + 1))!}$$

$$\frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(n_{ik} - n_{sa} - j^{sa} - l_{k_2})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{sa} - j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \Bigg) -$$

$$\sum_{k=i}^l \sum_{j_{ik}=j_{sa}^{ik}}^{( )} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=n+l_k}^n \sum_{n_{ik}=n_i-j_{ik}-l_{k_1}+1}^{( )} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2}}$$

$$\frac{(2 \cdot n_i + j_{sa}^{ik} - n_{sa} - j_{ik} - j^{sa} - s - 2 \cdot l_k + j_{sa}^s)!}{(2 \cdot n_i - n_{sa} - j^{sa} - n - 2 \cdot l_k + j_{sa}^s)! \cdot (n - s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l = i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge l_i \leq D + s - n \wedge$$

$$D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z^{DOST} S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=i}^{l_{sa}-i} \sum_{j_{sa}^{ik}=j_{sa}-k}^{l_{sa}-i-k} \sum_{j_{sa}=j_{sa}}^{l_{sa}-i-k}$$

$$\sum_{n_i=n+k}^n \sum_{n_{ik}=n_i-j_{ik}-k_2-j_{ik}+1}^{(n_i-j_{ik}-k_2-j_{ik}+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-k_2}$$

$$\frac{(n_i - j_{ik} - k_1 - 1)!}{(j_{ik} - n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{sa} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!}$$

$$\frac{(l_{ik} - i - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=i}^{l_{sa}-i} \sum_{j_{sa}^{ik}=j_{sa}-k}^{l_{sa}-i-k} \sum_{j_{sa}=j_{sa}}^{l_{sa}-i-k}$$

$$\sum_{n_i=n+k}^n \sum_{n_{ik}=n_i-j_{ik}-k_2-j_{ik}+1}^{(n_i-j_{ik}-k_2-j_{ik}+1)} \sum_{n_{sa}=n_{ik}+j_{ik}-j_{sa}-k_2}^{n_{ik}+j_{ik}-j_{sa}-k_2}$$

$$\frac{(2 \cdot n_i + j_{sa}^{ik} - n_{sa} - j_{ik} - j^{sa} - s - 2 \cdot \mathbb{k} + j_{sa}^s)!}{(2 \cdot n_i - n_{sa} - j^{sa} - \mathbf{n} - 2 \cdot \mathbb{k} + j_{sa}^s)! \cdot (\mathbf{n} - s)!}$$

$$\frac{(D - l_i)!}{(D + s - \mathbf{n} - l_i)! \cdot (\mathbf{n} - s)!}$$

$$D \geq \mathbf{n} < n \wedge l = {}_i l \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D \geq \mathbf{n} < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\sum_{k=0}^{\binom{D}{i}} \sum_{j_{sa}^{ik}=j_{sa}}^{l_{sa}-i+1} \sum_{n_i=\mathbf{n}+\mathbb{k}}^{\mathbf{n}} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\mathbf{n}-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \cdot \frac{(l_{ik} - {}_i l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - {}_i l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} - s)!}$$



$$\frac{(l_{ik} - i l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!}$$

$$\sum_{k=i}^{( )} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j_{sa}=j_{sa}^{sa}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n_i-j_{ik}-l_{k_1}+1)}^{( )} \sum_{n_{sa}=n_i-j_{sa}-l_{k_2}}^{( )}$$

$$\frac{(2 \cdot n_i + j_{sa}^{ik} - n_{sa} - j_{ik} - j_{sa}^{sa} - s - 2 \cdot l_k + j_{sa}^{sa})!}{(2 \cdot n_i - n_{sa} - j_{sa}^{sa} - s - 2 \cdot l_k + j_{sa}^{sa})! \cdot (n - s)!}$$

$$(D + j_{sa} - n - l_i)! \cdot (n - s)!$$

$$D \geq n < n \wedge l = i l \wedge l_s \leq D - n + 1$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa}^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa}^{sa} \leq n - j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{sa} - j_{sa} = l_{ik} \wedge$$

$$D \geq n < n \wedge l = i l > 0 \wedge$$

$$j_{sa}^{sa} \leq j_{sa}^{sa} - j_{sa}^{sa} < j_{sa}^{sa} - 1 \wedge j_{sa}^{sa} < j_{sa}^{sa} - 1 \wedge$$

$$s: \{j_{sa}^{sa}, \dots, l_{k_1}, j_{sa}^{sa}, \dots, l_{k_2}, j_{sa}^{sa}, \dots, j_{sa}^{sa}\} \wedge$$

$$s \geq 6, j_{sa}^{sa} = s + l_k \wedge$$

$$l_{k_z}: z = 2 \wedge l_{k_z} = l_{k_1} + l_{k_2} \Rightarrow$$

$$f_Z S_{j_{ik}, j_{sa}^{sa}}^{DOST} = \sum_{k=i}^{(l_{sa}+j_{sa}^{ik}-i l-j_{sa}+1)} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-l_{k_2}} \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!}$$



$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - i^l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i^l + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!}$$

$$\sum_{k=0}^{\mathbb{k}_2} \sum_{(j_{ik}=j_{sa}^{ik})} j^{sa}$$

$$\sum_{n_i=n+\mathbb{k}_2}^n \sum_{(n_{ik}=n_{sa}+j_{ik}-\mathbb{k}_2-1)} \sum_{(n_{sa}=n_{ik}+j_{sa}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(2 \cdot n_i + j_{sa}^{ik} - n_{sa} - j^{sa} - s - 2 \cdot \mathbb{k} + j_{sa}^s)!}{(2 \cdot n_i + n_{sa} - j^{sa} - n - 2 \cdot \mathbb{k} + j_{sa}^s)! \cdot (n - s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l = i^l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^i - j_{sa} \wedge$$

$$j_{sa}^i + j_{sa} - j_{sa}^i \leq j^{sa} \leq j_{sa}^i + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^i - j_{sa} = l_{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > \mathbb{k}_2 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{s_{sa}, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s \leq s + \mathbb{k} \wedge$$

$$\mathbb{k}_2: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=i^l}^{(l_{ik}-i^{l+1})} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2 - 1)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(j_{sa} - l - s)!}{(D + s - n - l)! \cdot (n - s)!}$$

$$\sum_{k=i}^{( )} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{( )} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}^{( )}$$

$$\frac{(2 \cdot n_i + j_{sa}^i - n_{sa} - j_{ik} - j^{sa} - s - 2 \cdot \mathbb{k} + j_{sa}^s)!}{(2 \cdot n_i - n_{sa} - j^{sa} - n - 2 \cdot \mathbb{k} + j_{sa}^s)! \cdot (n - s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$D \geq n < n \wedge l = l_i \wedge l_i \leq D - n + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j_{sa}^a + j_{sa}^{ik} - j_{sa}^a \wedge$

$j_{ik} - j_{sa}^{ik} \leq j_{sa}^{ik} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + j_{sa}^{ik} > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$

$l_{ik} - j_{sa}^{ik} - n \wedge l_i \leq D + s - n \wedge$

$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j^{sa}}^{DOST} = \sum_{k=i}^l \sum_{(j_{ik}=j_{sa}^{ik})}^{(l_{sa}+j_{sa}^{ik}-i-l-j_{sa}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-1}^{n_{ik}+j_{ik}-j^{sa}-1}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(n - i - l - j_{sa}^{ik})!}{(n_{ik} - j_{ik} - j_{sa}^{ik} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(n_{sa} + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!}$$

$$\sum_{k=i}^l \sum_{(j_{ik}=j_{sa}^{ik})}^{(\quad)} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\quad)} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}^{(\quad)}$$

$$\frac{(2 \cdot n_i + j_{sa}^{ik} - n_{sa} - j_{ik} - j^{sa} - s - 2 \cdot \mathbb{k} + j_{sa}^s)!}{(2 \cdot n_i - n_{sa} - j^{sa} - n - 2 \cdot \mathbb{k} + j_{sa}^s)! \cdot (n - s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$(D \geq n < n \wedge l = i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l = {}_i l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$l_{sa} \leq D + j_{sa} - n \wedge l_i \leq D + s - n)) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{i=l}^{(l_{ik} - i l + 1)} \sum_{(j_{ik} = j_{sa}^{ik})} l_{sa} - i l + 1 \sum_{j_{sa} = j_{sa}}$$

$$\sum_{n+\mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - i l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=1}^n \sum_{i^l (j_{ik}=j_{sa}^{ik})}^{()} \sum_{j_{sa}=j_{sa}}^{()} \sum_{n_i=n+l}^n \sum_{(n_{ik}=n_i-j_{ik}-l_{k_1}+1)}^{()} \sum_{n_{sa}=n_{ik}+j_{ik}-j_{sa}}^{()} \frac{(2 \cdot n_i + j_{sa}^{ik} - n_{sa} - j_{ik} - j_{sa} - s - 2 \cdot l_{k_1} + j_{sa}^{ik})!}{(2 \cdot n_i - n_{sa} - j_{sa} - n - 2 \cdot l_{k_1} + j_{sa}^{ik})! (n-s)!} \frac{(D - l_{k_1})!}{(D + s - l_{k_1} - 1)! (n-s)!}$$

$$D \geq n < n \wedge l = i^l \wedge l_{sa} \leq D + j_{sa} - n \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{k_1} \wedge$$

$$D \geq n < n \wedge l = l_{k_1} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, \dots, l_{k_2}, j_{sa}^{ik}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + l_{k_1} \wedge$$

$$l_{k_2}: z \geq 2 \wedge l_{k_2} = l_{k_1} \wedge l_{k_2} \Rightarrow$$

$$j_{ik} j_{sa}^{OST} = \left( \sum_{k=1}^n \sum_{i^l (j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})}^{()} \sum_{j_{sa}=j_{sa}}^{l_{ik}+j_{sa}-l_{k_1}-j_{sa}^{ik}+1} \sum_{n_i=n+l}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-l_{k_2}} \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - l_{k_2})!} \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \right)$$

$$\frac{(l_{ik} - i l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!} +$$

$$\left( \sum_{k=i l}^{(j^{sa} + j_{sa}^{ik} - j_{sa} - 1)} \sum_{(j_{ik} = j_{sa}^{ik})} \sum_{j_{sa} = j_{sa} + 1}^{l_{ik} + j_{sa} - i l - j_{sa}^{ik}}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{ik} + j_{ik} - j_{sa} - k_2}$$

$$\frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - i l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa} - j_{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=i l}^{(l_{ik} - i l + 1)} \sum_{(j_{ik} = j_{sa}^{ik})} \sum_{j_{sa} = l_{ik} + j_{sa} - i l - j_{sa}^{ik} + 2}^{l_{sa} - i l + 1}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - k_2}$$

$$\frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!}$$

GÜLDENWA

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - i^l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i^l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=0}^n \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{sa}} \sum_{n_i=n+l_k} \sum_{(n_{ik}=n-l_{k_1}-j_{ik}-l_{k_1})} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \frac{(2 \cdot n_i + j_{sa}^{ik} - n_{sa} - j_{sa} - j^{sa} - 2 \cdot l_k + j_{sa}^s)!}{(2 \cdot n_i - n_{sa} - j^{sa} - n - 2 \cdot l_k + j_{sa}^s)! \cdot (n - s)!} \cdot \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l = i^l \wedge l_{sa} \leq D - j_{sa} - n \wedge$$

$$j_{sa}^{ik} \leq j_{sa} \leq j^{sa} + j_{sa} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} - 1 \leq j^{sa} - n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge j_{sa}^{ik} + j_{sa} > l_{ik} \wedge$$

$$n \geq n < n \wedge l = l_k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^{ik} - 1 \wedge j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \dots, l_{k_2}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$n \geq 6 \wedge s = s + l_k \wedge$$

$$l_{k_2}: z = 2 \wedge l_k = l_{k_1} + l_{k_2} \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \left( \sum_{k=i^l}^{(l_{ik} - i^l + 1)} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\begin{aligned}
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{\substack{(n_i-j_{ik}-\mathbb{k}_1+1) \\ (n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}} \sum_{\substack{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2 \\ n_{sa}=n-j^{sa}+1}} \\
 & \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - i l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \left( \frac{(j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa} - s)!} \right) + \\
 & \left( \sum_{k=i l}^{(l_{ik} - i l)} \sum_{\substack{j_{sa}^{ik} \\ j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}}^{l_{sa} - i l + 1} \right) \cdot \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{\substack{(n_i-j_{ik}-\mathbb{k}_1+1) \\ (n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}} \sum_{\substack{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2 \\ n_{sa}=n-j^{sa}+1}} \\
 & \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - i l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \left( \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) -
 \end{aligned}$$

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$$\sum_{k=1}^n \sum_{i|l}^{( )} \sum_{j_{ik}=j_{sa}^{ik}}^{( )} \sum_{j_{sa}=j_{sa}}^{( )}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{( )} \sum_{n_{sa}=n_{ik}+j_{ik}-j_{sa}}^{( )}$$

$$\frac{(2 \cdot n_i + j_{sa}^{ik} - n_{sa} - j_{ik} - j_{sa} - s - 2 \cdot \mathbb{k} + j_{sa}^{ik})!}{(2 \cdot n_i - n_{sa} - j_{sa} - n - 2 \cdot \mathbb{k} + j_{sa}^s) \cdot (n-s)!}$$

$$\frac{(D - l_i)}{(D + s - l_i)! \cdot (n-s)!}$$

$$D \geq n < n \wedge l = i|l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - j_{sa}^{ik} > l_{sa} \wedge$$

$$l_i \leq D + s - n \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^{ik}\} \wedge$$

$$s \geq 6 \bullet s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z \cdot z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=1}^n \sum_{i|l}^{( )} \sum_{j_{ik}=j_{sa}^{ik}}^{( )} \sum_{j_{sa}=j_{sa}}^{( )}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!}$$

$$\sum_{k=i}^{(\cdot)} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{sa}^{ik}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n_i-j_{ik}-l_{k_1}+1)}^{(\cdot)} \sum_{n_{sa} \dots j_{ik} \dots j_{sa}^{ik} \dots a-l_{k_2}}$$

$$\frac{(2 \cdot n_i + j_{sa}^{ik} - n_{sa} - j_{ik} - j_{sa}^{ik} - s - 2 \cdot l_{k_1} + l_{k_2})!}{(2 \cdot n_i - n_{sa} - j_{sa}^{ik} - n - 2 \cdot l_{k_1} + l_{k_2} + j_{sa}^{ik})! \cdot (n - s)!}$$

$$\frac{(D - n)!}{(D + s - n - l_{sa})! \cdot (n - s)!}$$

$$((D \geq n < n \wedge l = i l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - s \wedge l_i \leq D + s - n \vee$$

$$(D \geq n < n \wedge l = i l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l = i l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=1}^{(\quad)} \sum_{i^l(j_{ik}^{j_{sa}})} \sum_{j_{sa}^s=j_{sa}}^{(\quad) j_{sa}^i - l + 1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n_{ik}+j_{ik}-\mathbb{k}_2}^{n_{ik}+j_{ik}-\mathbb{k}_2}^{n_{sa}=n-j_{sa}+1}$$

$$\frac{(n_{ik}-\mathbb{k}_1+1)! \cdot (n_{ik}-j_{ik}-\mathbb{k}_1+1)!}{(j_{ik}-2)! \cdot (n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2+1)!}{(j_{sa}^s-1)! \cdot (n_{ik}-j_{ik}-n_{sa}-j_{sa}-\mathbb{k}_2)!}$$

$$\frac{(n_{sa}-1)!}{(n_{sa}-j_{sa}-n-1)! \cdot (n-j_{sa})!}$$

$$\frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(l_{sa}+j_{sa}^{ik}-j_{sa}-l_{ik})! \cdot (j_{sa}-j_{sa})!}$$

$$\frac{(D+j_{sa}-l_{sa}-s)!}{(D+j_{sa}-n-l_{sa})! \cdot (n+j_{sa}-j_{sa}-s)!}$$

$$\sum_{k=1}^{(\quad)} \sum_{i^l(j_{ik}^{j_{sa}})} \sum_{j_{sa}^s=j_{sa}}^{(\quad)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1}^{(\quad)} \sum_{n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}^{(\quad)}$$

$$\frac{(2 \cdot n_i + j_{sa}^{ik} - n_{sa} - j_{ik} - j_{sa} - s - 2 \cdot \mathbb{k} + j_{sa}^s)!}{(2 \cdot n_i - n_{sa} - j_{sa} - n - 2 \cdot \mathbb{k} + j_{sa}^s)! \cdot (n - s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

## DİZİN

## B

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrisinin son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,  
2.3.3.1.1.1.1.1/3-4

tek kalan düzgün simetrik olasılık,  
2.3.3.2.1.1.1.1/3-4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.1.1.1.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrisinin son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,  
2.3.3.1.1.1.2.1/3-4

tek kalan düzgün simetrik olasılık,  
2.3.3.2.1.1.2.1/3-4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.1.1.2.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrisinin son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,  
2.3.3.1.1.1.3.1/3-4

tek kalan düzgün simetrik olasılık,  
2.3.3.2.1.1.3.1/3-4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.1.1.3.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bir bağımlı-bir bağımsız durumlu simetrisinin son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,  
2.3.3.1.1.1.1.1/230-231

tek kalan düzgün simetrik olasılık,  
2.3.3.2.1.1.1.1/187-188

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.1.1.1.1/321

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bir bağımlı-bir bağımsız durumlu bağımsız simetrisinin son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,  
2.3.3.1.1.1.2.1/230-231

tek kalan düzgün simetrik olasılık,  
2.3.3.2.1.1.2.1/187-188

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.1.1.2.1/321

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bir bağımlı-bir bağımsız durumlu bağımlı simetrisinin son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,  
2.3.3.1.1.1.3.1/230-231

tek kalan düzgün simetrik olasılık,  
2.3.3.2.1.1.3.1/187-188

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.1.1.3.1/321

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu simetrisinin son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,  
2.3.3.1.1.4.1.1/3-4

tek kalan düzgün simetrik olasılık,  
2.3.3.2.1.4.1.1/3-4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.1.4.1.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımsız simetrisinin son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,  
2.3.3.1.1.4.2.1/3-4

tek kalan düzgün simetrik olasılık,  
2.3.3.2.1.4.2.1/3-4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.1.4.2.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımlı simetrisinin son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,  
2.3.3.1.1.4.3.1/3-4

tek kalan düzgün simetrik olasılık,  
2.3.3.2.1.4.3.1/3-4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.1.4.3.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bir bağımlı-bağımsız durumlu

simetrisinin son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,  
2.3.3.1.1.1.1.1/233

tek kalan düzgün simetrik olasılık,  
2.3.3.2.1.1.1.1/190

tek kalan düzgün olmayan simetrik  
olasılık, 2.3.3.3.1.1.1.1/324-325

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bir bağımlı-bağımsız durumlu bağımsız simetrisinin son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,  
2.3.3.1.1.1.2.1/233

tek kalan düzgün simetrik olasılık,  
2.3.3.2.1.1.2.1/190

tek kalan düzgün olmayan simetrik  
olasılık, 2.3.3.3.1.1.2.1/324-325

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımlı simetrisinin son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,  
2.3.3.1.1.1.3.1/233

tek kalan düzgün simetrik olasılık,  
2.3.3.2.1.1.3.1/190

tek kalan düzgün olmayan simetrik  
olasılık, 2.3.3.3.1.1.3.1/324-325

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımsız simetrisinin son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,  
2.3.3.1.1.6.3.1/3-4

tek kalan düzgün simetrik olasılık,  
2.3.3.2.1.6.3.1/3-4

tek kalan düzgün olmayan simetrik  
olasılık, 2.3.3.3.1.6.3.1/3-4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımsız simetrisinin son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,  
2.3.3.1.1.6.2.1/3-4

tek kalan düzgün simetrik olasılık,  
2.3.3.2.1.6.2.1/3-4

tek kalan düzgün olmayan simetrik  
olasılık, 2.3.3.3.1.6.2.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu

bağımlı simetrisinin son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,  
2.3.3.1.1.6.3.1/3-4

tek kalan düzgün simetrik olasılık,  
2.3.3.2.1.6.3.1/3-4

tek kalan düzgün olmayan simetrik  
olasılık, 2.3.3.3.1.6.3.1/3-4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrisinin durumuna bağlı

tek kalan simetrik olasılık,  
2.3.3.1.1.1.1.1/118

tek kalan düzgün simetrik olasılık,  
2.3.3.2.1.1.1.1/80-81

tek kalan düzgün olmayan simetrik  
olasılık, 2.3.3.3.1.1.1.1/165

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrisinin durumuna bağlı

tek kalan simetrik olasılık,  
2.3.3.1.1.1.2.1/118

tek kalan düzgün simetrik olasılık,  
2.3.3.2.1.1.2.1/80-81

tek kalan düzgün olmayan simetrik  
olasılık, 2.3.3.3.1.1.2.1/165

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrisinin durumuna bağlı

tek kalan simetrik olasılık,  
2.3.3.1.1.1.3.1/118

tek kalan düzgün simetrik olasılık,  
2.3.3.2.1.1.3.1/80-81

tek kalan düzgün olmayan simetrik  
olasılık, 2.3.3.3.1.1.3.1/165

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrisinin ilk ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,  
2.3.3.1.2.1.1.1/4

tek kalan düzgün simetrik olasılık,  
2.3.3.2.2.1.1.1/3-4

tek kalan düzgün olmayan simetrik  
olasılık, 2.3.3.3.2.1.1.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrisinin ilk ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,  
2.3.3.1.2.1.2.1/4

tek kalan düzgün simetrik olasılık,  
2.3.3.2.2.1.2.1/3-4

tek kalan düzgün olmayan simetrik  
olasılık, 2.3.3.3.2.1.2.1/4

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımlı durumlu bağımlı  
simetrisinin ilk ve son durumunun  
bulunabileceği olaylara göre

tek kalan simetrik olasılık,  
2.3.3.1.2.1.3.1/4

tek kalan düzgün simetrik olasılık,  
2.3.3.2.2.1.3.1/3-4

tek kalan düzgün olmayan simetrik  
olasılık, 2.3.3.3.2.1.3.1/4

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımsız-bağımlı durumlu  
simetrisinin ilk ve son durumunun  
bulunabileceği olaylara göre

tek kalan simetrik olasılık,  
2.3.3.1.2.2.1.1/5

tek kalan düzgün simetrik olasılık,  
2.3.3.2.2.2.1.1/3-4

tek kalan düzgün olmayan simetrik  
olasılık, 2.3.3.3.2.2.1.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımsız-bağımlı durumlu  
bağımsız simetrisinin ilk ve son durumunun  
bulunabileceği olaylara göre

tek kalan simetrik olasılık,  
2.3.3.1.2.2.2.1/3-4

tek kalan düzgün simetrik olasılık,  
2.3.3.2.2.2.2.1/3-4

tek kalan düzgün olmayan simetrik  
olasılık, 2.3.3.3.2.2.2.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımsız-bağımlı durumlu  
bağımlı simetrisinin ilk ve son durumunun  
bulunabileceği olaylara göre

tek kalan simetrik olasılık,  
2.3.3.1.2.2.3.1/4

tek kalan düzgün simetrik olasılık,  
2.3.3.2.2.2.3.1/3-4

tek kalan düzgün olmayan simetrik  
olasılık, 2.3.3.3.2.2.3.1/4

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımlı-bir bağımsız durumlu  
simetrisinin ilk ve son durumunun  
bulunabileceği olaylara göre

tek kalan simetrik olasılık,  
2.3.3.1.2.4.1.1/4

tek kalan düzgün simetrik olasılık,  
2.3.3.2.2.4.1.1/3-4

tek kalan düzgün olmayan simetrik  
olasılık, 2.3.3.3.2.4.1.1/4

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımlı-bir bağımsız durumlu  
bağımsız simetrisinin ilk ve son durumunun  
bulunabileceği olaylara göre

tek kalan simetrik olasılık,  
2.3.3.1.2.4.2.1/4

tek kalan düzgün simetrik olasılık,  
2.3.3.2.2.4.2.1/3-4

tek kalan düzgün olmayan simetrik  
olasılık, 2.3.3.3.2.4.2.1/4

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımlı-bir bağımsız durumlu  
bağımlı simetrisinin ilk ve son durumunun  
bulunabileceği olaylara göre

tek kalan simetrik olasılık,  
2.3.3.1.2.4.3.1/4

tek kalan düzgün simetrik olasılık,  
2.3.3.2.2.4.3.1/3-4

tek kalan düzgün olmayan simetrik  
olasılık, 2.3.3.3.2.4.3.1/4

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımlı-bağımsız durumlu  
simetrisinin ilk ve son durumunun  
bulunabileceği olaylara göre

tek kalan simetrik olasılık,  
2.3.3.1.2.6.1.1/4

tek kalan düzgün simetrik olasılık,  
2.3.3.2.2.6.1.1/3-4

tek kalan düzgün olmayan simetrik  
olasılık, 2.3.3.3.2.6.1.1/4

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımlı-bağımsız durumlu  
bağımsız simetrisinin ilk ve son durumunun  
bulunabileceği olaylara göre

tek kalan simetrik olasılık,  
2.3.3.1.2.6.2.1/4

tek kalan düzgün simetrik olasılık,  
2.3.3.2.2.6.2.1/3-4

tek kalan düzgün olmayan simetrik  
olasılık, 2.3.3.3.2.6.2.1/4

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımlı-bağımsız durumlu  
bağımlı simetrisinin ilk ve son durumunun  
bulunabileceği olaylara göre

tek kalan simetrik olasılık,  
2.3.3.1.2.6.3.1/4

tek kalan düzgün simetrik olasılık,  
2.3.3.2.2.6.3.1/3-4

tek kalan düzgün olmayan simetrik  
olasılık, 2.3.3.3.2.6.3.1/4

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımsız-bağımsız durumlu  
simetrisinin ilk ve son durumunun  
bulunabileceği olaylara göre

tek kalan simetrik olasılık,  
2.3.3.1.2.7.1.1/5

tek kalan düzgün simetrik olasılık,  
2.3.3.2.2.7.1.1/3-4

tek kalan düzgün olmayan simetrik  
olasılık, 2.3.3.3.2.7.1.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımsız-bağımsız durumlu  
bağımsız simetrisinin ilk ve son durumunun  
bulunabileceği olaylara göre

tek kalan simetrik olasılık,  
2.3.3.1.2.7.2.1/5

tek kalan düzgün simetrik olasılık,  
2.3.3.2.2.7.2.1/3-4

tek kalan düzgün olmayan simetrik  
olasılık, 2.3.3.3.2.7.2.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımsız-bağımlı durumlu  
bağımlı simetrisinin ilk ve son durumunun  
bulunabileceği olaylara göre

tek kalan simetrik olasılık,  
2.3.3.1.3.2.7.3.1/5

tek kalan düzgün simetrik olasılık,  
2.3.3.2.3.2.7.3.1/3-4

tek kalan düzgün olmayan simetrik  
olasılık, 2.3.3.3.3.2.7.3.1/4

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımlı durumlu simetrisinin ilk  
ve herhangi bir durumunun bulunabileceği  
olaylara göre

tek kalan simetrik olasılık,  
2.3.3.1.3.1.1.1/4

tek kalan düzgün simetrik olasılık,  
2.3.3.2.3.1.1.1/3-4

tek kalan düzgün olmayan simetrik  
olasılık, 2.3.3.3.3.1.1.1/5

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımlı durumlu bağımsız  
simetrisinin ilk ve herhangi bir durumunun  
bulunabileceği olaylara göre

tek kalan simetrik olasılık,  
2.3.3.1.3.1.2.1/4

tek kalan düzgün simetrik olasılık,  
2.3.3.2.3.1.2.1/3-4

tek kalan düzgün olmayan simetrik  
olasılık, 2.3.3.3.3.1.2.1/5

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımlı durumlu bağımlı  
simetrisinin ilk ve herhangi bir durumunun  
bulunabileceği olaylara göre

tek kalan simetrik olasılık,  
2.3.3.1.3.1.3.1.1/4

tek kalan düzgün simetrik olasılık,  
2.3.3.2.3.1.3.1.1/3-4

tek kalan düzgün olmayan simetrik  
olasılık, 2.3.3.3.3.1.3.1.1/5

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımsız-bağımlı durumlu  
simetrisinin ilk ve herhangi bir durumunun  
bulunabileceği olaylara göre

tek kalan simetrik olasılık,  
2.3.3.1.3.2.1.1/5

tek kalan düzgün simetrik olasılık,  
2.3.3.2.3.2.1.1/3-4

tek kalan düzgün olmayan simetrik  
olasılık, 2.3.3.3.3.2.1.1/7

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımsız-bağımlı durumlu  
bağımsız simetrisinin ilk ve herhangi bir  
durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,  
2.3.3.1.3.2.2.1/5

tek kalan düzgün simetrik olasılık,  
2.3.3.2.3.2.2.1/3-4

tek kalan düzgün olmayan simetrik  
olasılık, 2.3.3.3.3.2.2.1/7

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımsız-bağımlı durumlu  
bağımlı simetrisinin ilk ve herhangi bir  
durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,  
2.3.3.1.3.2.3.1/4

tek kalan düzgün simetrik olasılık,  
2.3.3.2.3.2.3.1/3-4

tek kalan düzgün olmayan simetrik  
olasılık, 2.3.3.3.3.2.3.1/5

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımlı durumlu simetrisinin  
herhangi iki durumuna bağlı

tek kalan simetrik olasılık,  
2.3.3.1.4.1.1.1/4

tek kalan düzgün simetrik olasılık,  
2.3.3.2.4.1.1.1/3-4

tek kalan düzgün olmayan simetrik  
olasılık, 2.3.3.3.4.1.1.1/5

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımlı durumlu bağımsız  
simetrisinin herhangi iki durumuna bağlı

tek kalan simetrik olasılık,  
2.3.3.1.4.1.2.1/4

tek kalan düzgün simetrik olasılık,  
2.3.3.2.4.1.2.1/3-4

tek kalan düzgün olmayan simetrik  
olasılık, 2.3.3.3.4.1.2.1/5

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımlı durumlu bağımlı  
simetrisinin herhangi iki durumuna bağlı

tek kalan simetrik olasılık,  
2.3.3.1.4.1.3.1/4

tek kalan düzgün simetrik olasılık,  
2.3.3.2.4.1.3.1/3-4

tek kalan düzgün olmayan simetrik  
olasılık, 2.3.3.3.4.1.3.1/5

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımlı durumlu simetrisinin her  
durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,  
2.3.3.1.4.1.1.1/839-840

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımlı durumlu bağımsız  
simetrisinin her durumunun bulunabileceği  
olaylara göre

tek kalan simetrik olasılık,  
2.3.3.1.4.1.2.1/839-840

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımlı durumlu bağımlı  
simetrisinin her durumunun bulunabileceği  
olaylara göre

tek kalan simetrik olasılık,  
2.3.3.1.4.1.3.1/839-840

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımlı durumlu simetrisinin ilk  
ve herhangi iki durumunun bulunabileceği  
olaylara göre

tek kalan simetrik olasılık,  
2.3.3.1.5.1.1.1/5

tek kalan düzgün simetrik olasılık,  
2.3.3.2.5.1.1.1/4

tek kalan düzgün olmayan simetrik  
olasılık, 2.3.3.3.5.1.1.1/7

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımlı durumlu bağımsız  
simetrisinin ilk ve herhangi iki durumunun  
bulunabileceği olaylara göre

tek kalan simetrik olasılık,  
2.3.3.1.5.1.2.1/5

tek kalan düzgün simetrik olasılık,  
2.3.3.2.5.1.2.1/4

tek kalan düzgün olmayan simetrik  
olasılık, 2.3.3.3.5.1.2.1/7

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımlı durumlu bağımlı  
simetrisinin ilk ve herhangi iki durumunun  
bulunabileceği olaylara göre

tek kalan simetrik olasılık,  
2.3.3.1.5.1.3.1/5

tek kalan düzgün simetrik olasılık,  
2.3.3.2.5.1.3.1/4

tek kalan düzgün olmayan simetrik  
olasılık, 2.3.3.3.5.1.3.1/7

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımsız-bağımlı durumlu  
simetrisinin ilk ve herhangi iki durumunun  
bulunabileceği olaylara göre

tek kalan simetrik olasılık,  
2.3.3.1.5.2.1.1/6

tek kalan düzgün simetrik olasılık,  
2.3.3.2.5.2.1.1/3-4

tek kalan düzgün olmayan simetrik  
olasılık, 2.3.3.3.5.2.1.1/10

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımsız-bağımlı durumlu  
bağımsız simetrisinin ilk ve herhangi iki  
durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,  
2.3.3.1.5.2.2.1/6

tek kalan düzgün simetrik olasılık,  
2.3.3.2.5.2.2.1/3-4

tek kalan düzgün olmayan simetrik  
olasılık, 2.3.3.3.5.2.2.1/10

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımsız-bağımlı durumlu  
bağımlı simetrisinin ilk ve herhangi iki  
durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,  
2.3.3.1.5.2.3.1/5

tek kalan düzgün simetrik olasılık,  
2.3.3.2.5.2.3.1/3-4



tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.5.2.3.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrisinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre herhangi iki duruma bağlı

tek kalan simetrik olasılık, 2.3.3.1.8.1.1.1/7

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.8.1.1.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrisinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre herhangi iki duruma bağlı

tek kalan simetrik olasılık, 2.3.3.1.8.1.2.1/7

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.8.1.2.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrisinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre herhangi iki duruma bağlı

tek kalan simetrik olasılık, 2.3.3.1.8.1.3.1/7

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.8.1.3.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu simetrisinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre herhangi iki duruma bağlı

tek kalan simetrik olasılık, 2.3.3.1.8.2.1/11

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.8.2.1/11

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımsız simetrisinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre herhangi iki duruma bağlı

tek kalan simetrik olasılık, 2.3.3.1.8.2.2.1/11

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.8.2.2.1/11

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımlı simetrisinin ilk ve herhangi iki

durumunun bulunabileceği olaylara göre herhangi iki duruma bağlı

tek kalan simetrik olasılık, 2.3.3.1.8.2.3.1/7

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.8.2.1.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık, 2.3.3.1.6.1.1.1/4

tek kalan düzgün simetrik olasılık, 2.3.3.2.6.1.1.1/4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.6.1.1.1/5-6

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık, 2.3.3.1.6.1.2.1/5

tek kalan düzgün simetrik olasılık, 2.3.3.2.6.1.2.1/4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.6.1.2.1/5-6

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık, 2.3.3.1.6.1.3.1/5

tek kalan düzgün simetrik olasılık, 2.3.3.2.6.1.3.1/4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.6.1.3.1/5-6

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık, 2.3.3.1.6.2.1.1/6

tek kalan düzgün simetrik olasılık, 2.3.3.2.6.2.1.1/4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.6.2.1.1/8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımsız simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,  
2.3.3.1.6.2.2.1/6

tek kalan düzgün simetrik olasılık,  
2.3.3.2.6.2.2.1/4

tek kalan düzgün olmayan simetrik  
olasılık, 2.3.3.3.6.2.2.1/8

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımsız-bağımlı durumlu  
bağımlı simetrisinin ilk herhangi bir ve son  
durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,  
2.3.3.1.6.2.3.1/5

tek kalan düzgün simetrik olasılık,  
2.3.3.2.6.2.3.1/3-4

tek kalan düzgün olmayan simetrik  
olasılık, 2.3.3.3.6.2.3.1/5

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımlı-bir bağımsız durumlu  
simetrisinin ilk herhangi bir ve son  
durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,  
2.3.3.1.6.4.1.1/5

tek kalan düzgün simetrik olasılık,  
2.3.3.2.6.4.1.1/4

tek kalan düzgün olmayan simetrik  
olasılık, 2.3.3.3.6.4.1.1/5-6

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımlı-bir bağımsız durumlu  
bağımsız simetrisinin ilk herhangi bir ve son  
durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,  
2.3.3.1.6.4.2.1/6

tek kalan düzgün simetrik olasılık,  
2.3.3.2.6.4.2.1/4

tek kalan düzgün olmayan simetrik  
olasılık, 2.3.3.3.6.4.2.1/5-6

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımlı-bir bağımsız durumlu  
bağımlı simetrisinin ilk herhangi bir ve son  
durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,  
2.3.3.1.6.4.3.1/5

tek kalan düzgün simetrik olasılık,  
2.3.3.2.6.4.3.1/4

tek kalan düzgün olmayan simetrik  
olasılık, 2.3.3.3.6.4.3.1/5-6

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımlı-bağımsız durumlu  
simetrisinin ilk herhangi bir ve son  
durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,  
2.3.3.1.6.6.1.1/5

tek kalan düzgün simetrik olasılık,  
2.3.3.2.6.6.1.1/4

tek kalan düzgün olmayan simetrik  
olasılık, 2.3.3.3.6.6.1.1/5-6

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımlı-bağımsız durumlu  
bağımsız simetrisinin ilk herhangi bir ve son  
durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,  
2.3.3.1.6.6.2.1/5

tek kalan düzgün simetrik olasılık,  
2.3.3.2.6.6.2.1/4

tek kalan düzgün olmayan simetrik  
olasılık, 2.3.3.3.6.6.2.1/5-6

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımlı-bağımsız durumlu  
bağımlı simetrisinin ilk herhangi bir ve son  
durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,  
2.3.3.1.6.6.3.1/5

tek kalan düzgün simetrik olasılık,  
2.3.3.2.6.6.3.1/4

tek kalan düzgün olmayan simetrik  
olasılık, 2.3.3.3.6.6.3.1/5-6

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımsız-bağımsız durumlu  
simetrisinin ilk herhangi bir ve son  
durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,  
2.3.3.1.6.7.1.1/6

tek kalan düzgün simetrik olasılık,  
2.3.3.2.6.7.1.1/4

tek kalan düzgün olmayan simetrik  
olasılık, 2.3.3.3.6.7.1.1/8

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımsız-bağımsız durumlu  
bağımsız simetrisinin ilk herhangi bir ve son  
durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,  
2.3.3.1.6.7.2.1/6

tek kalan düzgün simetrik olasılık,  
2.3.3.2.6.7.2.1/4

tek kalan düzgün olmayan simetrik  
olasılık, 2.3.3.3.6.7.2.1/8

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımsız-bağımsız durumlu  
bağımlı simetrisinin ilk herhangi bir ve son  
durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,  
2.3.3.1.6.7.3.1/5

tek kalan düzgün simetrik olasılık,  
2.3.3.2.6.7.3.1/3-4

tek kalan düzgün olmayan simetrik  
olasılık, 2.3.3.3.6.7.3.1/5

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımlı durumlu simetrisinin ilk  
herhangi bir ve son durumunun  
bulunabileceği olaylara göre herhangi bir  
ve son duruma bağlı

tek kalan simetrik olasılık,  
2.3.3.1.9.1.1.1/7

tek kalan düzgün olmayan simetrik  
olasılık, 2.3.3.3.9.1.1.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımlı durumlu bağımsız  
simetrisinin ilk herhangi bir ve son  
durumunun bulunabileceği olaylara göre  
herhangi bir ve son duruma bağlı

tek kalan simetrik olasılık,  
2.3.3.1.9.1.2.1/7

tek kalan düzgün olmayan simetrik  
olasılık, 2.3.3.3.9.1.2.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımlı durumlu bağımlı  
simetrisinin ilk herhangi bir ve son  
durumunun bulunabileceği olaylara göre  
herhangi bir ve son duruma bağlı

tek kalan simetrik olasılık,  
2.3.3.1.9.1.3.1/7

tek kalan düzgün olmayan simetrik  
olasılık, 2.3.3.3.9.1.3.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımlı-bağımsız durumlu  
simetrisinin ilk herhangi bir ve son  
durumunun bulunabileceği olaylara göre  
herhangi bir ve son duruma bağlı

tek kalan simetrik olasılık,  
2.3.3.1.9.2.1.1/11

tek kalan düzgün olmayan simetrik  
olasılık, 2.3.3.3.9.2.1.1/11

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımsız-bağımlı durumlu  
bağımsız simetrisinin ilk herhangi bir ve son  
durumunun bulunabileceği olaylara göre  
herhangi bir ve son duruma bağlı

tek kalan simetrik olasılık,  
2.3.3.1.9.2.2.1/11

tek kalan düzgün olmayan simetrik  
olasılık, 2.3.3.3.9.2.2.1/11

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımsız-bağımlı durumlu  
bağımlı simetrisinin ilk herhangi bir ve son  
durumunun bulunabileceği olaylara göre  
herhangi bir ve son duruma bağlı

tek kalan simetrik olasılık,  
2.3.3.1.9.2.3.1/7

tek kalan düzgün olmayan simetrik  
olasılık, 2.3.3.3.9.2.3.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımlı-bir bağımsız durumlu  
simetrisinin ilk herhangi bir ve son  
durumunun bulunabileceği olaylara göre  
herhangi bir ve son duruma bağlı

tek kalan simetrik olasılık,  
2.3.3.1.9.4.1.1/7

tek kalan düzgün olmayan simetrik  
olasılık, 2.3.3.3.9.4.1.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımlı-bir bağımsız durumlu  
bağımlı simetrisinin ilk herhangi bir ve son  
durumunun bulunabileceği olaylara göre  
herhangi bir ve son duruma bağlı

tek kalan simetrik olasılık,  
2.3.3.1.9.4.2.1/7

tek kalan düzgün olmayan simetrik  
olasılık, 2.3.3.3.9.4.2.1/11

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımlı-bir bağımsız durumlu  
bağımlı simetrisinin ilk herhangi bir ve son  
durumunun bulunabileceği olaylara göre  
herhangi bir ve son duruma bağlı

tek kalan simetrik olasılık,  
2.3.3.1.9.4.3.1/7

tek kalan düzgün olmayan simetrik  
olasılık, 2.3.3.3.9.4.3.1/11

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımlı-bağımsız durumlu  
simetrisinin ilk herhangi bir ve son  
durumunun bulunabileceği olaylara göre  
herhangi bir ve son duruma bağlı

tek kalan simetrik olasılık,  
2.3.3.1.9.6.1.1/7

tek kalan düzgün olmayan simetrik  
olasılık, 2.3.3.3.9.6.1.1/11

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımlı-bağımsız durumlu  
bağımsız simetrisinin ilk herhangi bir ve son

durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı

tek kalan simetrik olasılık,  
2.3.3.1.9.6.2.1/7

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.9.6.2.1/11

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımlı simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı

tek kalan simetrik olasılık,  
2.3.3.1.9.6.3.1/7

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.9.6.3.1/11

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı

tek kalan simetrik olasılık,  
2.3.3.1.9.7.1.1/11

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.9.7.1.1/11

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımsız simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı

tek kalan simetrik olasılık,  
2.3.3.1.9.7.2.1/11

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.9.7.2.1/11

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu bağımsız simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı

tek kalan simetrik olasılık,  
2.3.3.1.9.7.3.1/11

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.9.7.3.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,  
2.3.3.1.7.1.1.1/5

tek kalan düzgün simetrik olasılık,  
2.3.3.2.7.1.1.1/4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.7.1.1.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,  
2.3.3.1.7.1.2.1/5

tek kalan düzgün simetrik olasılık,  
2.3.3.2.7.1.2.1/4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.7.1.2.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,  
2.3.3.1.7.1.3.1/5

tek kalan düzgün simetrik olasılık,  
2.3.3.2.7.1.3.1/4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.7.1.3.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,  
2.3.3.1.7.2.1.1/7

tek kalan düzgün simetrik olasılık,  
2.3.3.2.7.2.1.1/4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.7.2.1.1/10-11

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımsız simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,  
2.3.3.1.7.2.2.1/7

tek kalan düzgün simetrik olasılık,  
2.3.3.2.7.2.2.1/4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.7.2.2.1/10-11

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımlı simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,  
2.3.3.1.7.2.3.1/5

tek kalan düzgün simetrik olasılık,  
2.3.3.2.7.2.3.1/3-4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.7.2.3.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık, 2.3.3.1.7.4.1.1/5

tek kalan düzgün simetrik olasılık, 2.3.3.2.7.4.1.1/4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.7.4.1.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımsız simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık, 2.3.3.1.7.4.2.1/5

tek kalan düzgün simetrik olasılık, 2.3.3.2.7.4.2.1/4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.7.4.2.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımlı simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık, 2.3.3.1.7.4.3.1/5

tek kalan düzgün simetrik olasılık, 2.3.3.2.7.4.3.1/4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.7.4.3.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık, 2.3.3.1.7.6.1.1/5

tek kalan düzgün simetrik olasılık, 2.3.3.2.7.6.1.1/4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.7.6.1.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımsız simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık, 2.3.3.1.7.6.2.1/5

tek kalan düzgün simetrik olasılık, 2.3.3.2.7.6.2.1/4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.7.6.2.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımlı simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık, 2.3.3.1.7.6.3.1/5

tek kalan düzgün simetrik olasılık, 2.3.3.2.7.6.3.1/4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.7.6.3.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık, 2.3.3.1.7.7.1/7

tek kalan düzgün simetrik olasılık, 2.3.3.2.7.7.1.1/4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.7.7.1.1/10-11

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu bağımsız simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık, 2.3.3.1.7.7.2.1/7

tek kalan düzgün simetrik olasılık, 2.3.3.2.7.7.2.1/4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.7.7.2.1/10-11

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu bağımlı simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık, 2.3.3.1.7.7.3.1/5

tek kalan düzgün simetrik olasılık, 2.3.3.2.7.7.3.1/3-4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.7.7.3.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.10.1.1.1/9

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.10.1.1.1/10

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.10.1.2.1/9

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.10.1.2.1/10

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.10.1.3.1/9

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.10.1.3.1/10

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.10.2.1.1/15

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.10.2.1.1/16

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımlı durumlu bağımsız simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.10.2.2.1/15-16

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.10.2.2.1/16

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımlı simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.10.2.3.1/9-10

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.10.2.3.1/10

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu simetrisinin ilk herhangi iki ve son

durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.10.4.1.1/9

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.10.4.1.1/16

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımsız simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.10.4.2.1/9

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.10.4.2.1/16

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımlı simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.10.4.3.1/9

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.10.4.3.1/16

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.10.6.1.1/9

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.10.6.1.1/16

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımsız simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.10.6.2.1/9

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.10.6.2.1/16

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımlı simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.10.6.3.1/9

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.10.6.3.1/16

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.10.7.1.1/15-16

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.10.7.1.1/16

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu bağımsız simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.10.7.2.1/15-16

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.10.7.2.1/16

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu bağımlı simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.10.7.3.1/9-10

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.10.7.3.1/9-10

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.11.1.1.1/10

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.11.1.1.1/10-11

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.11.1.2.1/10

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.11.1.2.1/10-11

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrisinin ilk herhangi iki ve son

durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.11.1.3.1/10

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.11.1.3.1/10-11

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.11.2.1.1/17-18

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.11.2.1.1/17-18

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımsız simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.11.2.2.1/17

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.11.2.2.1/17-18

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımlı simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.11.2.3.1/10

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.11.2.3.1/10-11

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.11.4.1.1/10

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.11.4.1.1/17-18

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımsız simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.11.4.2.1/10

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.11.4.2.1/17-18

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımlı simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.11.4.3.1/10

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.11.4.3.1/17-18

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.11.6.1.1/10

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.11.6.1.1/17-18

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımsız simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.11.6.2.1/10

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.11.6.2.1/17-18

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımlı simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.11.6.3.1/10

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.11.6.3.1/17-18

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.11.7.1.1/17

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.11.7.1.1/17-18

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu bağımsız simetrisinin ilk herhangi iki ve son

durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.11.7.2.1/17

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.11.7.2.1/17-18

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu bağımlı simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.11.7.3.1/10

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.11.7.3.1/10-11



VDOİHİ’de Olasılık ve İhtimal konularının tanım ve eşitlikleri verilmektedir. Ayrıca VDOİHİ’de olasılık ve ihtimalin uygulama alanlarına da yer verilmektedir. VDOİHİ konu anlatım ciltleri ve soru, problem ve ispat çözümlerinden oluşmaktadır. Bu cilt bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz olasılık dağılımlardan, bağımsız olasılıklı durumla başlayıp ilk bağımlı durumu bağımlı olasılıklı dağılımın ilk bağımlı durumu hariç dağılımın başlayabileceği diğer bir bağımlı durum olan ve bağımsız olasılıklı durumla başlayan dağılımın aynı ilk bağımlı durumuyla başlayan dağılımlarda, simetrisinin herhangi iki durumuna bağlı tek kalan düzgün olmayan simetrik olasılığın, tanım ve eşitliklerinden oluşmaktadır.

VDOİHİ Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu olasılığın herhangi iki durumuna bağlı tek kalan düzgün olmayan simetrik olasılık kapsamında, bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz dağılımlardan, bağımsız olasılıklı durumla başlayıp ilk bağımlı durumu bağımlı olasılıklı dağılımın ilk bağımlı durumu hariç dağılımın başlayabileceği diğer bir bağımlı durum olan ve bağımsız olasılıklı durumla başlayan dağılımın aynı ilk bağımlı durumuyla başlayan dağılımlarda, simetrisinin herhangi iki durumuna bağlı tek kalan düzgün olmayan simetrik olasılığın, tanım ve eşitlikleri verilmektedir.

VDOİHİ’nin diğer ciltlerinde olduğu gibi bu ciltte de verilen ana eşitlikler, olasılık tablolarından elde edilen verilerle üretilmiştir. Diğer eşitlikler ise ana eşitliklerden teorik yöntemle üretilmiştir. Eşitlik ve tanımların üretilmesinde diğer kaynak kullanılmamıştır.